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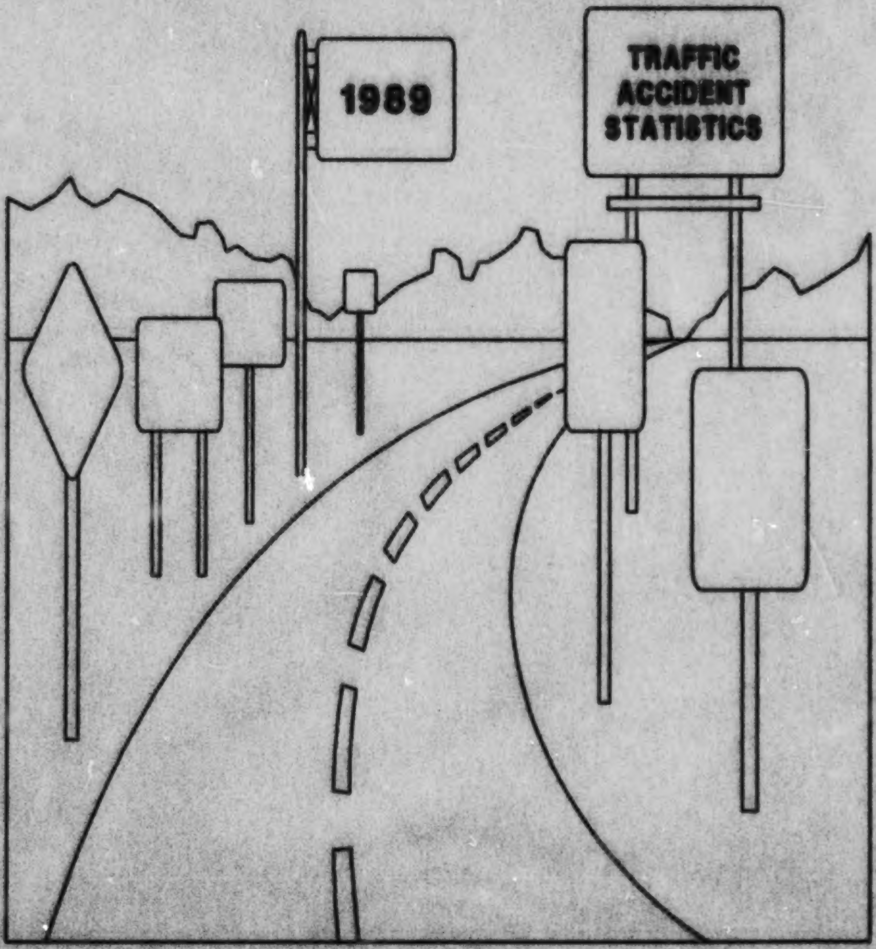
1989
TRAFFIC
ACCIDENT
STATISTICS

MOTOR VEHICLE BRANCH

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Province of British Columbia

OFFICE OF THE
SOLICITOR GENERAL

Ministry of
Solicitor General

Parliament Buildings
Victoria
British Columbia
V8V 1X4
Telephone: (604) 387-1683

MESSAGE FROM THE SOLICITOR GENERAL

As Solicitor General and Minister responsible for public safety, I am well aware of the importance with which traffic safety is regarded by the citizens of this province. This is an issue which clearly affects virtually every British Columbian. In 1989, a total of 587 persons were killed in motor vehicle accidents and 47,471 were injured. These sad statistics do not begin to tell the story of the human suffering and tragedy these accidents represent.

There are many programs in place to promote highway safety, and many of these have proven to be effective examples of government - citizen cooperation. In spite of our past efforts, it is apparent that the problem warrants even greater attention. Government recognizes its responsibility to provide leadership and direction in seeking out solutions, and has recently introduced a number of initiatives targeted at improving traffic safety in the province.

In June 1989, a Traffic Safety Directorate was established in my Ministry as a focal point for the development of new initiatives and to provide guidance to research, evaluation and public information. The Directorate and the Motor Vehicle Branch are actively pursuing new and promising initiatives aimed at improving the attitudes and behaviour of all road users. Information such as that contained in this report will play a vital role in the research and development that we undertake and will assist us in raising the level of awareness of traffic safety issues amongst the general public.

Every person in this province can have a direct impact on reducing the tragedy and cost of traffic accidents. I look forward to the commitment and cooperation of all road users in combatting this serious social problem.

Russell Fraser

Hon. Russell G. Fraser
Solicitor General

MINISTRY OF SOLICITOR GENERAL

MOTOR VEHICLE BRANCH

1989 TRAFFIC ACCIDENT STATISTICS

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INTRODUCTION

TRAFFIC ACCIDENT SYSTEM

Overview

The Motor Vehicle Branch Traffic Accident System is designed to compile and maintain information on all reportable traffic accidents occurring in the Province of British Columbia. Traffic Accident information is used by the Motor Vehicle Branch for compiling statistics to determine accident trends; for support of road user safety and driver improvement programs (both at the provincial and federal level); for monitoring of commercial vehicle accident trends and commercial vehicle safety programs; and for use by management in planning, development of new policies and programs and monitoring the effectiveness of existing programs.

Data extracted from this system is also used in research by provincial and federal government agencies, the Insurance Corporation of British Columbia, other jurisdictions, municipal engineering departments and by the R.C.M. Police and Municipal Police forces in the development of law enforcement priorities and programs.

Application

Motor vehicle accidents are reportable in British Columbia if they result in personal injury or death or aggregate property damage in excess of $400. A motorist must report an accident to police within 24 hours of occurrence (48 hours in remote communities).

Police, in turn, forward a completed Police Investigation Report to the Motor Vehicle Branch within ten days for processing.

Reports are screened, microfilmed, input to the database, and stored on the host computer at B.C. Systems Corporation in hierarchical (FOCUS) format.

The Traffic Accident System interfaces with the Driver Licencing System. Selected information such as accident type, date of occurrence, location, and presence of alcohol involvement is passed to the Driver System to be included on an individual's driving record. Linkage is through the driver's licence number.

Reporting

The accident data is used to produce a variety of reports. Among these are monthly and quarterly Police Data Package reports, which provide police with feedback on accident activity in their jurisdiction and assist in the performance of selective law enforcement priorities; and quarterly and annual Engineering Data Package reports to assist in the planning and design of municipal roadways.

Numerous statistics are produced for use in the Ministry's annual Report as well as the annual Traffic Accident Statistics Report. All reports, including ad hoc reports, are generated using FOCUS, a fourth generation analysis and reporting language.

The statistics in this report, extracted April 4, 1990, are for the calendar year 1989. We hope that this publication will increase public awareness of the importance of safe driving practices and lead to improved traffic safety on our highways.

For information regarding this publication, and to receive additional copies, please contact:

Ministry of Solicitor General
Motor Vehicle Branch
2631 Douglas Street
Victoria, B.C.
V8T 5A3

(604) 387-1065

Attention: Road Safety Division

DEFINITIONS OF TERMS USED IN REPORTS

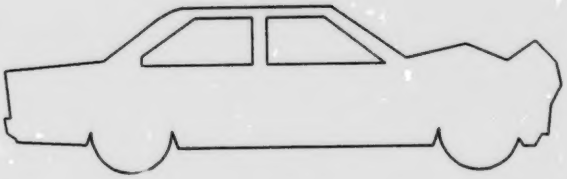
ACCIDENT	Event without apparent cause. Reportable in B.C. when injury or death occurs or when greater than $400 aggregate property damage is sustained; in the case of a cycle when greater than $25 in damage is sustained.
AIR BAG	Inflatable safety device usually stored in vehicle dashboard or steering wheel/column. Upon impact, bag is released and inflated to cushion vehicle occupants and prevent serious injury.
ALCOHOL INVOLVEMENT	Any alcohol involvement, suspected or confirmed, e.g., driver had been drinking; odor of liquor.
ARTIFICIAL GLARE	Glare caused by streetlight, headlights, or other man-made light source.
A.T.V.	All Terrain Vehicle: any type of vehicle propelled by motorized power and capable of travel on or off a highway as defined in the HIGHWAY ACT and that is designated as an All Terrain Vehicle by regulation under the ALL TERRAIN VEHICLES ACT.
BICYCLE	"Cycle Bi/Tri" 2 or 3 wheeled, pedal driven vehicle.
CHILD RESTRAINT	Federally approved child safety seat.
COMB. UNIT TRK/HY	Combination Unit - Truck/Heavy: truck and trailer unit over 10,900 kg.
COMB. UNIT TRK/LT	Combination Unit - Truck/Light: truck and trailer unit, trailer under 4,600 kg and total not over 10,900 kg.
COMB. UNIT TRACTOR TLR	Combination Unit - Tractor Trailer: tractor and semi-trailer unit, over 10,900 kg.
COMB. UNIT TRAC/TLR & PUP	Combination Unit - Tractor Trailer & Pup: tractor and semi-trailer and pup trailer (pup = 4 wheel trailer).
COMMERCIAL VEHICLE	A vehicle licenced as such under the COMMERCIAL TRANSPORT ACT and used primarily for commercial/business purposes.
CONSTRUCTION (Section 3)	Road maintenance, and/or construction on roadway which contributes to accident.
CRASH CUSHION	Water or sand filled container placed against abutments etc., used to absorb vehicle impact and lessen accident severity.

DRIVER TRAINING VEHICLE	Licenced driving school vehicle being used for driver training at time of accident.
EMERGENCY VEHICLE	Motor vehicle carrying rescue or first aid equipment, whether or not actually responding to an emergency at time of accident.
FARM VEHICLE	A vehicle used primarily as an implement of husbandry and licenced as such under the COMMERCIAL TRANSPORT ACT, e.g., farm tractor, combine, thresher.
FATAL ACCIDENT	Any motor vehicle or other road vehicle accident occurring on a 'public highway' as defined in the MOTOR VEHICLE ACT which results in fatal injuries to one or more persons and these persons are deceased within 30 days of the accident. A suicide, although not an "accident", is considered a fatal motor vehicle accident, however, a homicide, also not an "accident", is not considered a fatal motor vehicle accident.
GENERAL CONSTRUCTION VEHICLE	Backhoe, bulldozer, crawler, digger, excavator, forklift, loader, mower, skidder, trencher.
GOVERNMENT VEHICLE	Federal; Provincial; Municipal; Regional District: registration indicates government, but does not include emergency vehicles.
HEAVY COMMERCIAL VEHICLE	Single or combination truck unit over 10,900 kg.
HOLIDAY	Time period beginning at 6 p.m. the evening before a holiday or holiday weekend, and ending at midnight the last day of the holiday or holiday weekend.
ILLUMINATION	Man-made lighting in the accident vicinity, e.g., street lighting. This does not refer to temporary illumination which comes from passing vehicles or from moonlight, even if those may have contributed to the accident.
IMPACT ATTENUATOR	Refer to "Crash Cushion"
INDUSTRIAL ROAD	Any road which is constructed or exists for the transportation of natural resources, raw or manufactured, or the transportation of machinery, materials, or personnel by means of motor vehicles; includes all bridges, wharves, log dumps, and works. Does not include public roads, privately owned roads or roads used solely for construction or maintenance of power lines, etc.

JACK-KNIFING	Attached vehicle fails to follow path of towing vehicle. Vehicle and trailer turn or rise to 90 degrees or less.
LIGHTING CONDITIONS	DARK/FULL ILLUMINATION: dark condition but accident area is fully illuminated by artificial light. DARK/NO ILLUMINATION: complete darkness. DARK/SOME ILLUMINATION: dark condition but some artificial light exists.
MAJOR CONTRIBUTING FACTOR	Those circumstances or events that the attending police officer perceives to directly contribute to a traffic accident.
MODIFIED VEHICLE	A vehicle which deviates from manufacturer's specifications.
MOPED	Vehicle capable of being operated by pedals and is equipped with a motor under 50 cc (any class driver's licence or special class 6). Moped on flat surface not to exceed 50 km/h under power.
MOTOR VEHICLE	A motorized device in, upon, or by which a person or thing is, or may be transported or drawn upon a highway, except a device designed to be used exclusively upon stationary rails or tracks.
OBSTRUCTION/DEBRIS (Section 3)	Debris in travelled portion of roadway which contributes to traffic accident.
OVERSIZE VEHICLE	A vehicle more than 70 feet in length with width greater than 8 feet 6 inches, and height greater than 13 feet.
OFF HIGHWAY	Private place, field, bush, e.g., All Terrain Vehicles on private road indicated by signs.
PERSONAL INJURY ACCIDENT	Any motor vehicle or other road vehicle accident occurring on a 'public highway' as defined in the MOTOR VEHICLE ACT which results in injury but not death to one or more persons.
PRIMARY ACCIDENT OCCURRENCE	The key event of an accident.
PROPERTY DAMAGE ACCIDENT	Any motor vehicle or other road vehicle accident occurring on a 'public highway' as defined in the MOTOR VEHICLE ACT in which greater than $400 aggregate property damage, or in the case of a cycle $25 damage is sustained, but no injury or death occurs.

PUBLIC BUS	Any public transportation bus, city transit, B.C. Hydro, tourist bus.
RECREATIONAL VEHICLE	Vehicle used for personal use outside usual environment, e.g., vacation, sightseeing.
ROAD CONSTRUCTION VEHICLE	Grader, paver, roller.
SAFETY EQUIPMENT	Seatbelts, motorcycle helmets, airbags, child restraints.
SCHOOL BUS	A motor vehicle used for conveyance of children to and from school by or under contract with the authority in charge of the school.
SIGN OBSTRUCTION	Temporary sign erected on roadway; sign obstructed by trees, etc.
SINGLE UNIT TRUCK/HVY	Single Unit Truck/Heavy: single unit truck over 10,900 kg.
SINGLE UNIT TRK/LT	Single Unit Truck/Light: single unit truck up to 10,900 kg.
SPECIAL VEHICLES	Road construction vehicles, general construction vehicles, mobile home in transit, mobile crane.
VICTIM	A person involved in a motor vehicle or other road vehicle accident who is injured or killed.
VEHICLE	A device in, upon, or by which a person or thing is, or may be transported or drawn upon a highway, except a device designed to be moved by human power or used exclusively upon stationary rails or tracks.
YAW	Body of the vehicle is on an exaggerated lean to one side while continuing forward and wheels side slipping while rotating on the surface, forming angular striation on the highway surface.

SECTION 1



SUMMARY STATISTICS

1988 - 1989 COMPARATIVE STATISTICS

SUMMARY STATISTICS	1988	1989	% CHANGE
ACCIDENTS			
PROPERTY DAMAGE ONLY	101,277	111,304	+ 9.90
PERSONAL INJURY	30,935	33,062	+ 6.87
FATAL	535	491	- 8.22
TOTAL REPORTED ACCIDENTS	132,747	144,857	+ 9.12
VICTIMS			
NUMBER OF PERSONS INJURED	44,161	47,471	+ 7.49
NUMBER OF PERSONS KILLED	615	587	- 4.55
TOTAL VICTIMS	44,776	48,058	+ 7.33
DRIVERS			
LICENCED FEMALE DRIVERS	1,092,334	1,150,689	+ 5.34
LICENCED MALE DRIVERS	1,349,297	1,405,850	+ 4.19
TOTAL LICENCED DRIVERS	2,441,631	2,556,539	+ 4.70
VEHICLES			
LICENCED PASSENGER VEHICLES	1,681,597	1,740,131	+ 3.48
LICENCED COMMERCIAL VEHICLES	602,785	620,301	+ 2.90
LICENCED TRAILERS	271,098	280,563	+ 3.49
LICENCED MOTORCYCLES	66,055	60,458	- 8.47
TOTAL VEHICLES LICENCED(during the year)	2,621,335	2,701,454	+ 3.05

cont'd ...

1988 - 1989 COMPARATIVE STATISTICS

SUMMARY STATISTICS	1988	1989	% CHANGE
ACCIDENT RATES			
ESTIMATED B.C. POPULATION	3,029,900*	3,101,886**	+ 2.41
ACCIDENTS PER 100 LICENCED DRIVERS	5.44	5.66	+ 4.04
ACCIDENTS PER 100 PEOPLE	4.38	4.67	+ 6.62
ACCIDENTS PER 100 LICENCED VEHICLES	5.06	5.36	+ 5.93

* Estimated as of May 25, 1989 (Statistics Canada).
** Estimated as of May 08, 1990 (Statistics Canada).

Note: Due to difficulties in obtaining the required information we are no longer calculating accident rates based on distance travelled (km).

1989 SUMMARY ACCIDENT FACTS

ACCIDENTS

- The 144,857 reportable accidents in 1989 represents an increase of 12,110 accidents or 9.1% over 1988.

  - Fatal accidents decreased from 535 to 491, or 2%. They now represent 0.34% of all accidents.

  - Personal injuries increased from 30,935 to 33,062, or 6.9%, now representing 22.8% of all accidents.

  - Property damage rose to 111,304 from 101,277 in 1988, or 9.9%. This represents 76.8% of all accidents.

- A motor vehicle accident occurred every 3.63 minutes in British Columbia during 1989, or 20 seconds faster than in 1988 and 58 seconds faster than 1987.

FATALITIES

- Fatalities decreased in 1989 for the second consecutive year, from 615 in 1988 to 587, or 4.5%.

  Decreases attributable to:

  - decrease of 5% by drivers (14 cases)
  - decrease of 14% by pedestrians (13 cases)
  - decrease of 60% by cyclists (15 cases)
  - decrease of 34% by motorcycles (16 cases)

- However, passenger fatalities increased from 156 to 188 or 20.5%.

- The monthly high of 64 fatalities occurred in both June and July, together representing almost 22% of total fatalities for the year.

CASUALTIES

- An average for 1989, there was a injury in an accident every 11 minutes, one minute faster than 1988.

- However, a fatality occurred on average every 15 hours, one hour slower than 1988.

- Casualty rates were the highest for person between the ages of 16 - 20. Approximately 20% of all victims killed and injured were in this age group; 16% were between the ages of 21 and 25; 2% were under the age of six.

SUMMARY ACCIDENTS FACTS cont'd ...

ALCOHOL INVOLVEMENT

- As in 1988, alcohol involvement as a contributing factor decreased by a percentage point in 1989.
- as a contributing factor, it represented 7.15% of the total identified, or a 0.56% decrease from 1988, but a 2% decrease from 1987.
- More encouraging, alcohol contributed to 22.2% of all fatal accidents - a decrease from 1988 of 30 incidents, or 9.8%.
- Alcohol was involved in 5.8% of all property damage incidents, an increase over 1988, but 10% of personal injury accidents, a decrease of 1.83%.
- 43% of alcohol related incidents resulted in injury or death, down 2% from 1988.

CONTRIBUTING FACTORS

- These relative magnitudes are unchanged from 1988:
    - 81% Human Condition or Action
    - 16.7% Environmental Conditions
    - 2.3% Vehicle Condition
- In order of magnitude, the most frequent contributing factors cited in 1989 were: Driving without Due Care, Failing to Yield Right of Way, Backing Unsafely, Driving at an Unsafe Speed, Alcohol Involvement, Following too Closely, and Weather Condition.

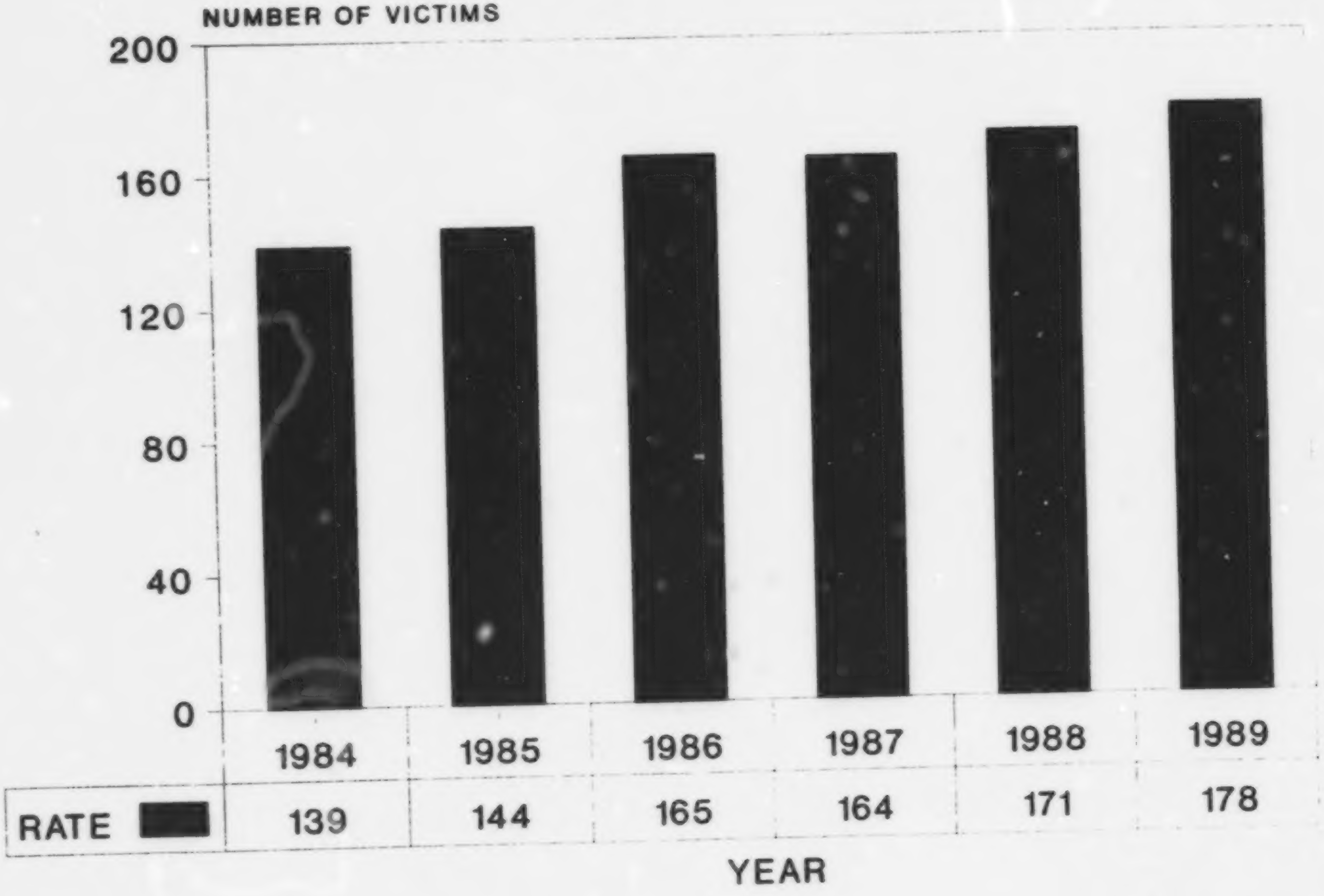
MOTOR VEHICLE TRAFFIC ACCIDENT FREQUENCIES - 1977 to 1989

YEAR	TOTAL VEHICLES LICENCED DURING YEAR	NUMBER OF ACCIDENTS	ACCIDENTS PER 1,000 VEHICLES LICENCED	DEATHS	DEATHS PER 10,000 VEHICLES LICENCED	INJURIES	INJURIES PER 10,000 VEHICLES LICENCED
1977	not available	115,046	n/a	718	n/a	31,942	n/a
1978	not available	112,635	n/a	640	n/a	33,105	n/a
1979	not available	123,863	n/a	738	n/a	37,809	n/a
1980	not available	143,577	n/a	811	n/a	41,500	n/a
1981	not available	127,831*	n/a	859	n/a	44,123	n/a
1982	2,331,760	111,868*	47.98	601	2.58	33,807	144.98
1983	2,339,690	102,065*	43.62	607	2.59	31,855	136.15
1984	2,366,852	98,506*	41.62	525	2.22	32,407	136.92
1985	2,413,725	102,928*	42.64	483	2.00	34,368	142.39
1986	2,483,161	113,042*	45.52	599	2.41	40,378	162.61
1987	2,556,166	114,366*	44.74	622	2.43	41,291	161.53
1988	2,621,535	132,747*	50.64	615	2.35	44,161	168.45
1989	2,701,454	144,857*	53.62	587	2.17	47,471	175.72

In 1989 there were 491 fatal accidents in which 587 victims were killed. Also, during this year 47,471 victims were injured in 33,062 casualty producing accidents.

*The number of accidents occurring between 1981 and 1989 cannot be compared to previous years because the reporting level for property damage only accidents was raised January 1, 1981 from $200.00 to $400.00. This has significantly reduced the number of accidents reported since 1981.

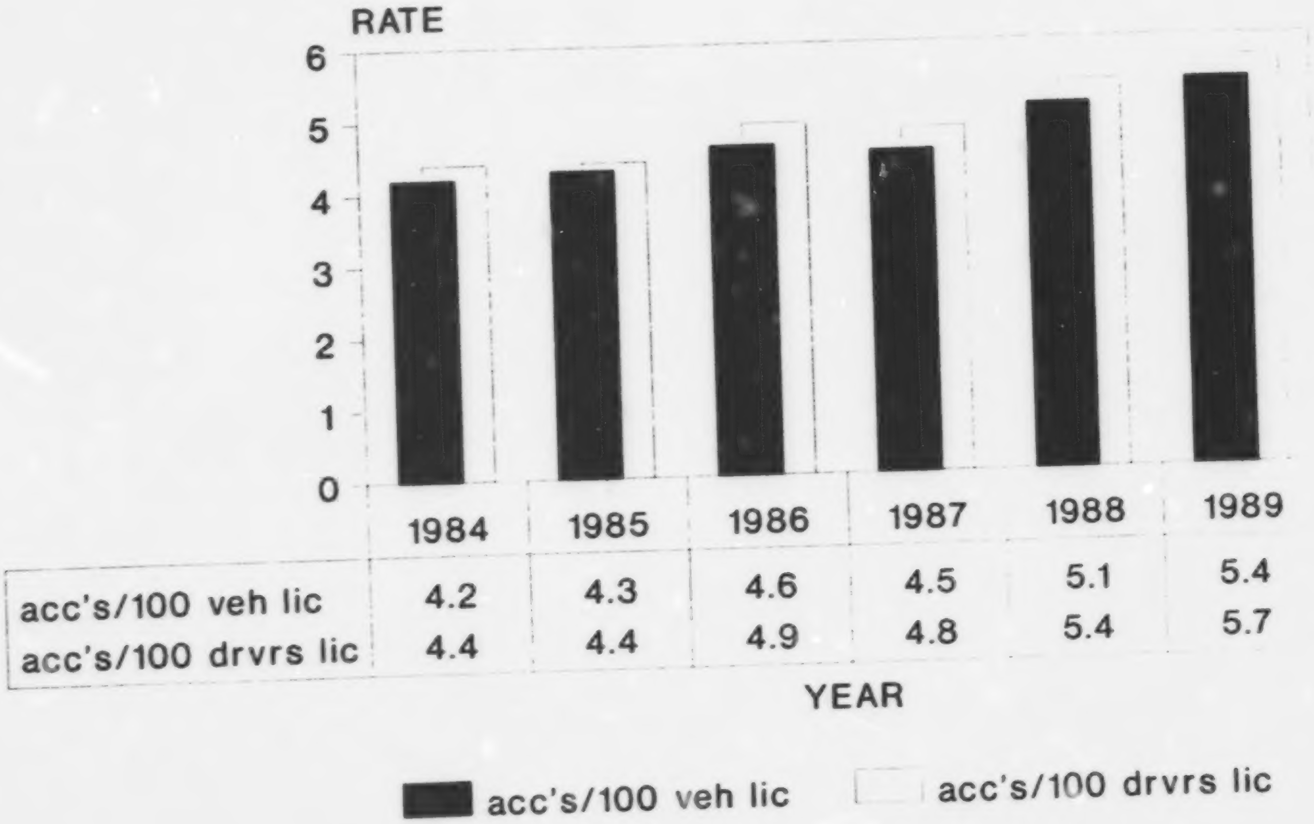
The figures involving vehicles licenced were recalculated for all years in 1988, based on vehicles licenced throughout the year, as opposed to vehicles licenced at December 31.



ANNUAL TRAFFIC ACCIDENT CASUALTY RATE PER 100,000 VEHICLES (1983 - 1989)

fig.1

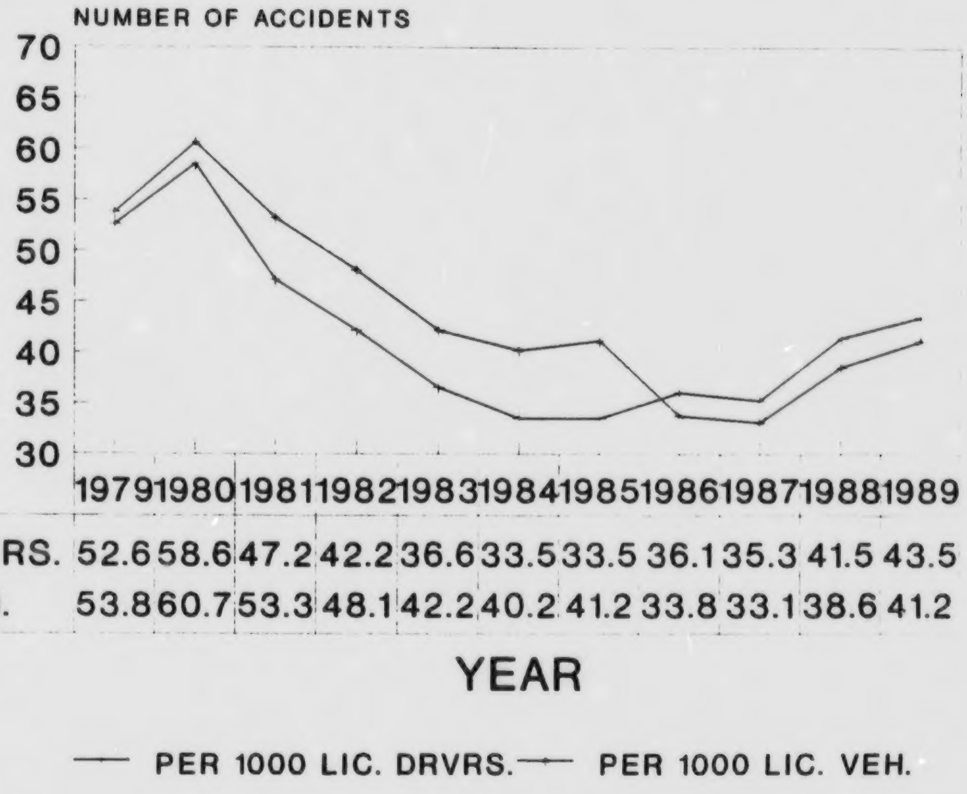
PROVINCIAL ACCIDENT RATES
BY VEHICLES & DRIVERS LICENCED



	1984	1985	1986	1987	1988	1989
acc's/100 veh lic	4.2	4.3	4.6	4.5	5.1	5.4
acc's/100 drvrs lic	4.4	4.4	4.9	4.8	5.4	5.7

fig. 2

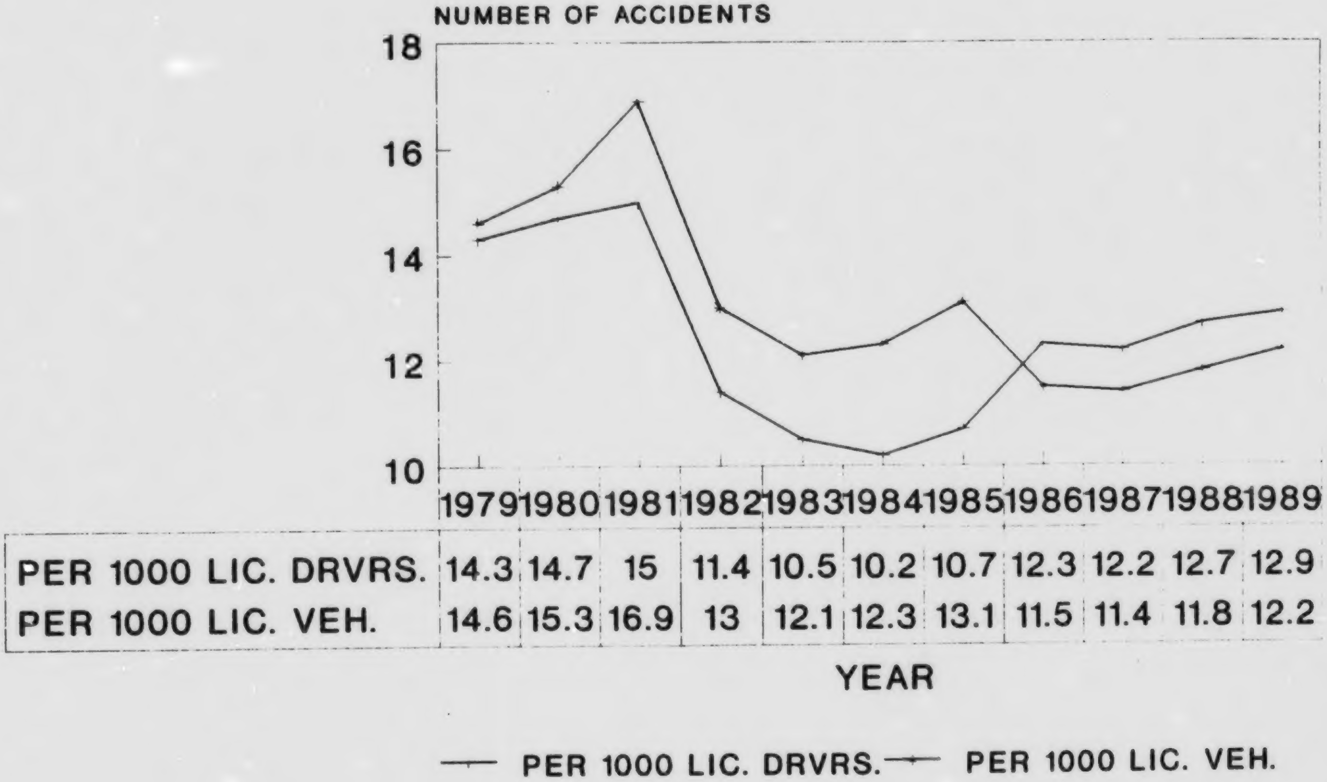
TEN YEAR ACCIDENT TREND
PROPERTY DAMAGE ACCIDENTS



	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
PER 1000 LIC. DRVRS.	52.6	58.6	47.2	42.2	36.6	33.5	33.5	36.1	35.3	41.5	43.5
PER 1000 LIC. VEH.	53.8	60.7	53.3	48.1	42.2	40.2	41.2	33.8	33.1	38.6	41.2

fig. 3

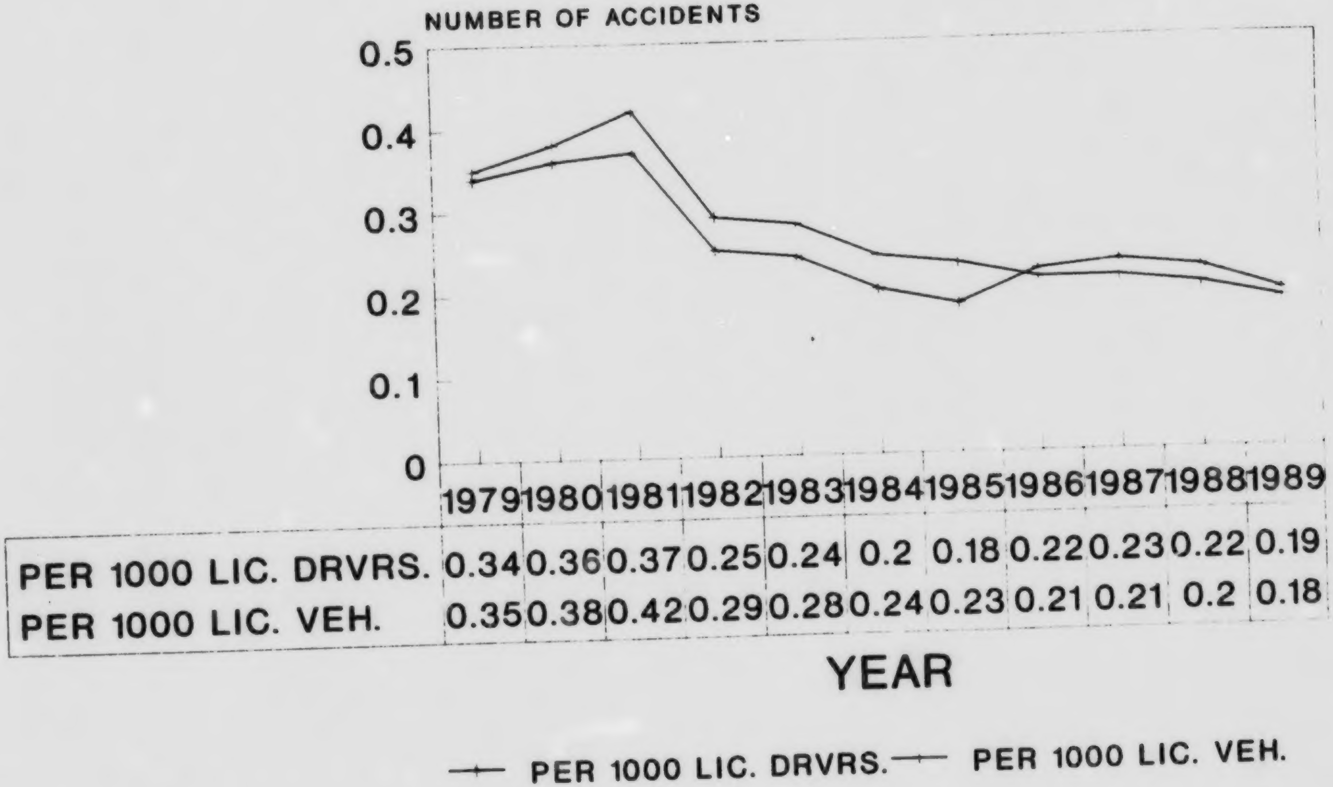
TEN YEAR ACCIDENT TREND
PERSONAL INJURY ACCIDENTS



	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
PER 1000 LIC. DRVRS.	14.3	14.7	15	11.4	10.5	10.2	10.7	12.3	12.2	12.7	12.9
PER 1000 LIC. VEH.	14.6	15.3	16.9	13	12.1	12.3	13.1	11.5	11.4	11.8	12.2

fig. 4

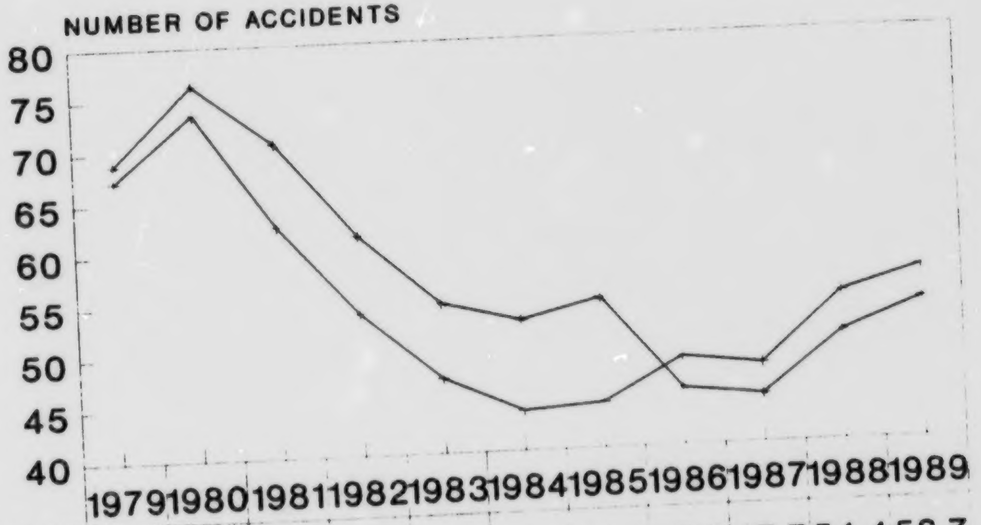
TEN YEAR ACCIDENT TREND
FATAL ACCIDENTS



	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
PER 1000 LIC. DRVRS.	0.34	0.36	0.37	0.25	0.24	0.2	0.18	0.22	0.23	0.22	0.19
PER 1000 LIC. VEH.	0.35	0.38	0.42	0.29	0.28	0.24	0.23	0.21	0.21	0.2	0.18

fig. 5

TEN YEAR ACCIDENT TREND
ALL ACCIDENTS

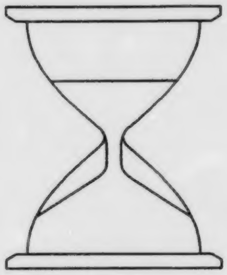


	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
PER 1000 LIC. DRVRS.	67.2	73.6	62.5	53.8	47.3	43.9	44.4	48.6	47.7	54.4	56.7
PER 1000 LIC. VEH.	68.8	76.4	70.6	61.4	54.6	52.7	54.6	45.5	44.7	50.6	53.6

YEAR

fig. 6

SECTION 2



TIME OF OCCURRENCE

1989 ACCIDENTS - TIME OF OCCURRENCE

The greatest number of casualties was recorded in August, although July and November totals were very close. The greatest number of accidents occurred in November. Similar to 1988, the casualty rate ranged from 38.6 accidents per 100 accidents in July to 29.0 in February.

Friday witnessed the most accidents and claimed the most victims, although Saturday claimed the most fatalities.

With respect to property damage and injury accidents, 28 to 30 percent occurred between 2:00 and 6:00 pm, while:

- 20.7% of fatalities occurred between 3 and 6 pm.
  18.7% of fatalities occurred between midnight and 3 am.
- The highest incidence of fatalities occurred Saturday, between 2 and 3 am.
- The highest incidence of personal injury and property damage occurred on Friday between 4 and 5 pm.

1989 ACCIDENTS AND VICTIMS BY MONTH

MONTH	ACCIDENTS				VICTIMS		
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL	TOTAL ACCIDENTS	INJURED	KILLED	TOTAL VICTIMS
JANUARY	10,664	2,479	38	13,181	3,557	44	3,601
FEBRUARY	8,731	2,221	32	10,984	3,140	40	3,180
MARCH	9,122	2,573	28	11,723	3,651	33	3,684
APRIL	7,575	2,400	28	10,003	3,406	29	3,435
MAY	8,509	2,628	32	11,169	3,731	37	3,768
JUNE	8,812	2,879	50	11,741	4,160	64	4,224
JULY	8,585	2,934	53	11,572	4,402	64	4,466
AUGUST	8,717	3,010	47	11,774	4,467	58	4,525
SEPTEMBER	8,508	2,807	51	11,366	3,949	57	4,006
OCTOBER	10,251	3,016	37	13,304	4,302	47	4,349
NOVEMBER	10,970	3,154	40	14,164	4,445	52	4,497
DECEMBER	10,860	2,961	55	13,876	4,261	62	4,323
TOTAL	111,304	33,062	491	144,857	47,471	587	48,058

DISTRIBUTION OF ACCIDENTS AND VICTIMS BY MONTH - 1989

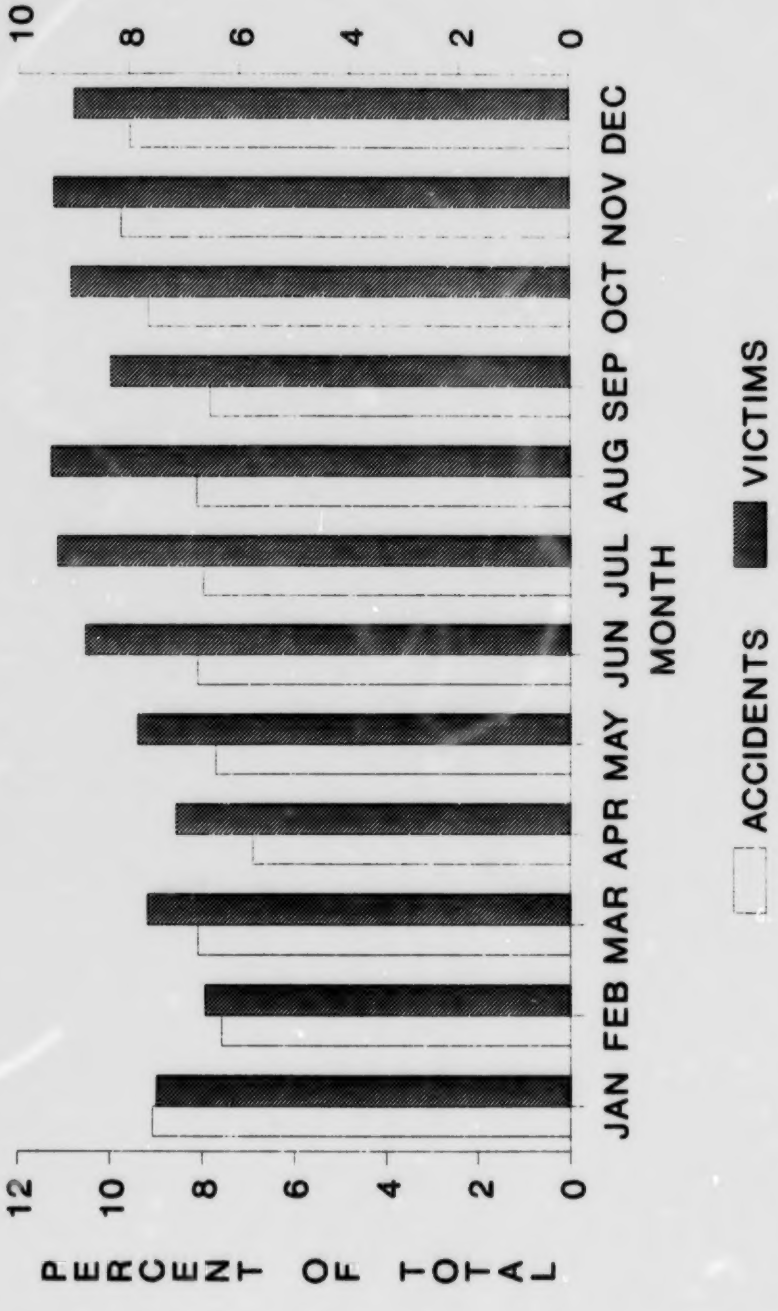
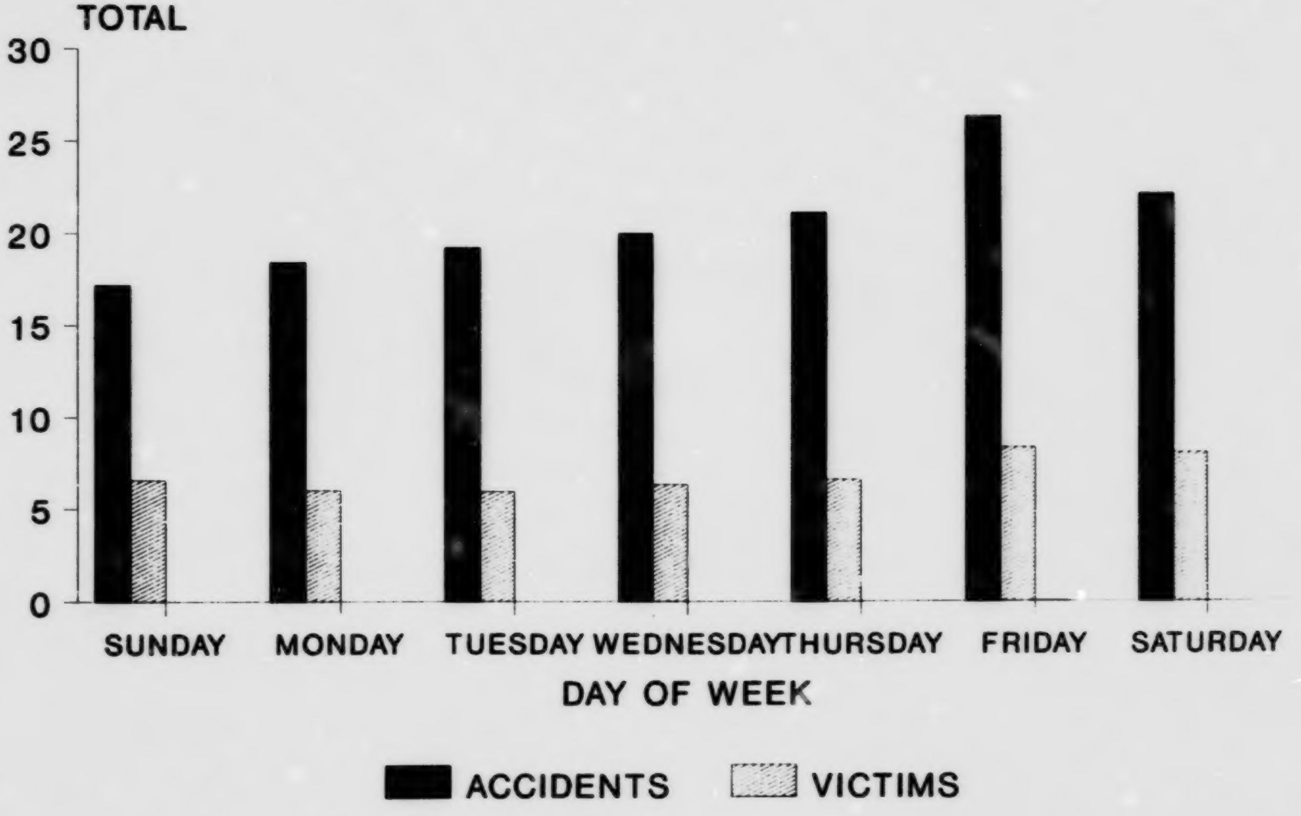


fig. 7

1989 ACCIDENTS BY DAY OF WEEK

DAY OF WEEK	ACCIDENT TYPE PROPERTY DAMAGE	 PERSONAL INJURY	 FATAL	TOTAL ACCIDENTS	PERCENT OF TOTAL
SUNDAY	12,973	4,152	73	17,198	11.87
MONDAY	14,182	4,232	50	18,464	12.75
TUESDAY	14,941	4,283	54	19,278	13.31
WEDNESDAY	15,483	4,515	58	20,056	13.85
THURSDAY	16,396	4,749	56	21,201	14.64
FRIDAY	20,447	5,873	93	26,413	18.23
SATURDAY	16,882	5,258	107	22,247	15.36
TOTAL	111,304	33,062	491	144,857	100.00



DISTRIBUTION OF ACCIDENTS AND VICTIMS
BY DAY OF WEEK

fig. 8

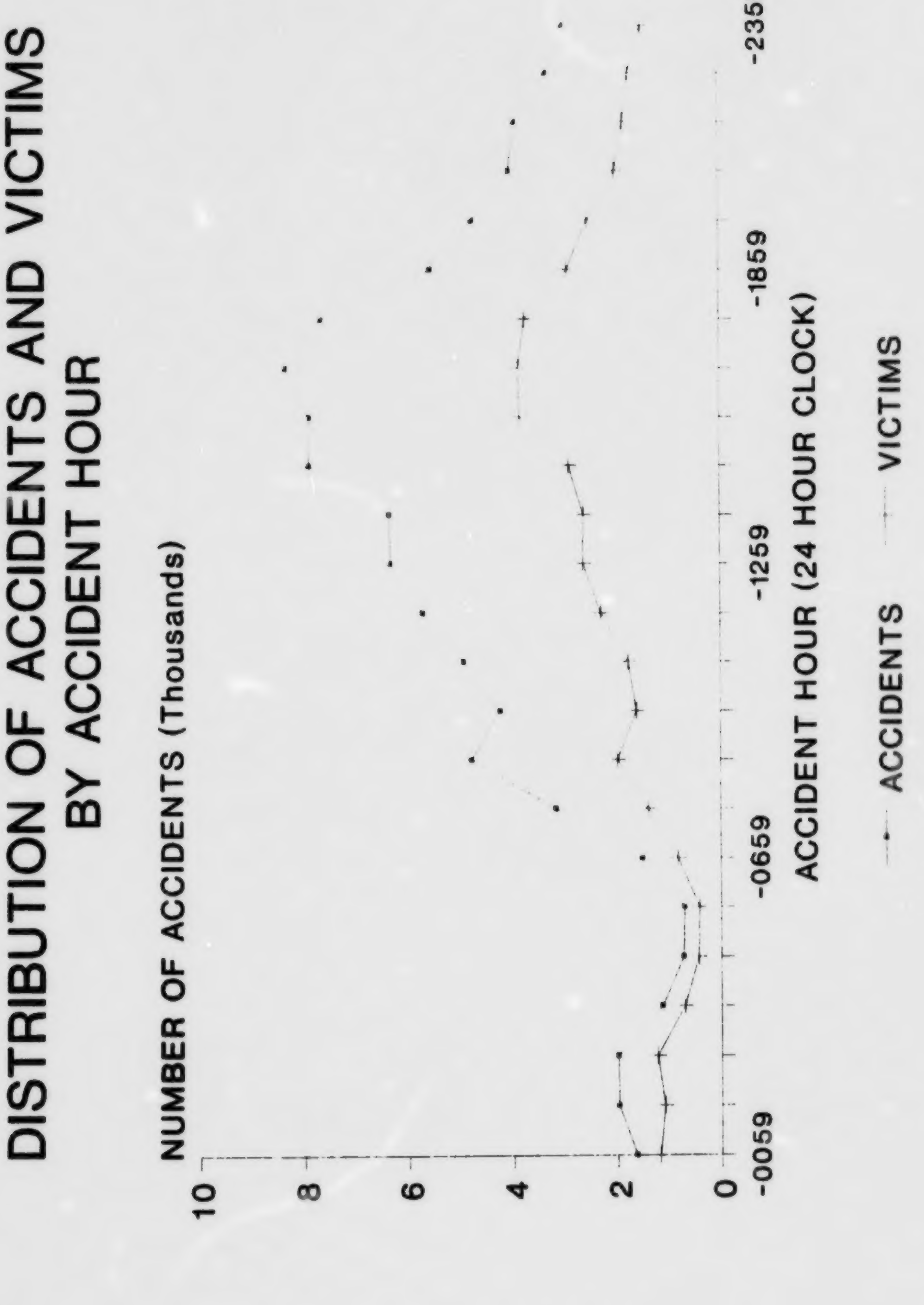

DISTRIBUTION OF ACCIDENTS AND VICTIMS
BY ACCIDENT HOUR
NUMBER OF ACCIDENTS (Thousands)
10
8
6
4
2
0
-0059
-0659
-1259
-1859
-2359
ACCIDENT HOUR (24 HOUR CLOCK)
ACCIDENTS
VICTIMS

fig. 9

1989 PROPERTY DAMAGE ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

ACCIDENT HOUR	DAY OF WEEK							TOTAL PROPERTY DAMAGE ACCIDENTS
	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.	
Mid. - 1 am	337	144	163	155	169	211	447	1,626
1 am - 2 am	477	148	165	178	172	292	544	1,976
2 am - 3 am	546	91	147	163	198	248	592	1,985
3 am - 4 am	312	66	86	74	114	131	352	1,135
4 am - 5 am	178	62	74	62	69	95	183	723
5 am - 6 am	135	69	76	86	94	97	145	702
6 am - 7 am	149	183	267	251	244	239	178	1,511
7 am - 8 am	165	484	563	643	527	564	220	3,166
8 am - 9 am	232	687	832	951	843	841	418	4,804
9 am - 10 am	364	574	639	683	665	775	540	4,240
10 am - 11 am	490	669	659	753	798	808	772	4,949
11 am - Noon	601	709	753	877	914	961	918	5,733
Noon - 1 pm	687	840	890	879	978	1,121	963	6,358
1 pm - 2 pm	829	797	842	832	899	1,103	1,072	6,374
2 pm - 3 pm	923	944	855	874	1,016	1,202	1,110	6,924
3 pm - 4 pm	782	1,090	1,115	1,186	1,224	1,502	1,009	7,908
4 pm - 5 pm	797	1,233	1,243	1,197	1,271	1,639	996	8,376
5 pm - 6 pm	812	986	1,089	1,084	1,228	1,514	975	7,688
6 pm - 7 pm	633	705	759	753	810	1,116	802	5,578
7 pm - 8 pm	547	593	645	594	724	1,001	657	4,761
8 pm - 9 pm	499	496	528	503	556	842	625	4,049
9 pm - 10 pm	462	496	449	504	568	870	586	3,935
10 pm - 11 pm	386	416	388	387	462	778	510	3,327
11 pm - Mid.	305	316	336	312	422	720	593	3,004
UNKNOWN	1,325	1,384	1,378	1,502	1,431	1,777	1,675	10,472
TOTAL	12,973	14,182	14,941	15,483	16,396	20,447	16,882	111,304

1989 PERSONAL INJURY ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

ACCIDENT HOUR	DAY OF WEEK							TOTAL INJURY ACCIDENTS
	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.	
Mid. - 1 am	167	79	62	68	77	87	196	736
1 am - 2 am	213	41	64	71	61	75	181	706
2 am - 3 am	231	29	59	54	89	93	228	783
3 am - 4 am	138	27	42	25	38	51	134	455
4 am - 5 am	92	19	19	31	21	33	81	296
5 am - 6 am	58	22	29	26	35	41	61	272
6 am - 7 am	58	76	93	101	79	86	83	576
7 am - 8 am	57	159	184	202	177	185	87	1,051
8 am - 9 am	71	224	254	301	255	261	142	1,508
9 am - 10 am	93	169	190	197	208	192	137	1,186
10 am - 11 am	141	169	171	173	199	214	205	1,272
11 am - Noon	187	216	197	221	245	250	291	1,607
Noon - 1 pm	198	257	242	257	252	293	313	1,812
1 pm - 2 pm	262	230	231	274	243	312	310	1,862
2 pm - 3 pm	274	263	247	259	307	325	345	2,020
3 pm - 4 pm	296	377	396	394	427	465	329	2,684
4 pm - 5 pm	281	407	384	413	411	551	319	2,766
5 pm - 6 pm	289	375	386	359	416	496	337	2,658
6 pm - 7 pm	229	260	259	265	287	370	307	1,977
7 pm - 8 pm	205	233	207	207	242	304	229	1,627
8 pm - 9 pm	157	150	160	167	170	315	204	1,323
9 pm - 10 pm	131	158	134	145	161	261	190	1,180
10 pm - 11 pm	117	128	118	120	155	258	213	1,109
11 pm - Mid.	104	91	85	101	112	237	204	934
UNKNOWN	103	73	70	84	82	118	132	662
TOTAL	4,152	4,232	4,283	4,515	4,749	5,873	5,258	33,062

1989 FATAL ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

ACCIDENT HOUR	DAY OF WEEK							TOTAL FATAL ACCIDENTS
	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.	
Mid. - 1 am	4	3	1	2	1	7	10	28
1 am - 2 am	5	3	1	4	3	1	4	21
2 am - 3 am	4	0	2	0	4	6	17	33
3 am - 4 am	2	1	2	0	4	1	2	12
4 am - 5 am	4	0	1	2	2	0	2	11
5 am - 6 am	4	2	1	0	1	1	4	13
6 am - 7 am	2	1	0	2	2	1	3	11
7 am - 8 am	1	3	2	1	2	2	2	13
8 am - 9 am	3	2	1	1	1	1	4	13
9 am - 10 am	1	4	2	2	0	1	2	12
10 am - 11 am	2	0	2	2	6	2	3	17
11 am - Noon	1	1	1	3	0	2	3	11
Noon - 1 pm	2	3	3	3	4	3	5	23
1 pm - 2 pm	4	1	2	3	3	1	2	16
2 pm - 3 pm	4	1	4	4	1	3	4	21
3 pm - 4 pm	4	5	5	7	4	7	4	36
4 pm - 5 pm	4	5	3	5	1	10	4	32
5 pm - 6 pm	6	2	4	6	6	6	4	34
6 pm - 7 pm	3	3	4	4	1	8	3	26
7 pm - 8 pm	1	1	3	4	2	8	5	24
8 pm - 9 pm	4	3	0	2	1	4	2	16
9 pm - 10 pm	2	3	2	0	2	6	6	21
10 pm - 11 pm	2	0	4	1	1	4	7	19
11 pm - Mid.	3	3	4	0	3	7	4	24
UNKNOWN	1	0	0	0	1	1	1	4
TOTAL	73	50	54	58	56	93	107	491

SECTION 3

MAJOR CONTRIBUTING FACTORS

1989 ACCIDENTS - MAJOR CONTRIBUTING FACTORS

Contributing factors are those circumstances or events that the attending police officer perceives to contribute directly to a traffic accident. The Traffic Investigation Report permits up to three contributing factors or causes to be attributed to each vehicle or driver involved in an accident.

The figures in this chapter's tables and graphs represent the first identified contributing factor for each driver/vehicle in those accidents for which police have assigned a cause.

In 1989, 90,503 factors were attributed to 144,851 accidents, with 30.5% of accidents not assigned a causal factor (compared to 35% in 1988).

Human action and human condition played the major role, representing 81% of all contributing factors. Human action represents 68% of all factors - the two most frequent causes - driving without due care and failing to yield the right of way - together represent 28.4% of all factors. The next largest factors are backing unsafely, unsafe speed and alcohol involvement.

Although alcohol involvement makes up only 7.15% of total factors, it represents 22% of fatalities and 10% of injuries for which factors were assigned.

MAJOR CONTRIBUTING FACTORS IN 1989 ACCIDENTS

BY CATEGORY

CONTRIBUTING FACTOR CATEGORY	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
HUMAN ACTION	42,523	19,142	244	61,909	68.41
ENVIRONMENTAL CONDITION	11,700	3,312	51	15,063	16.64
HUMAN CONDITION	6,759	4,550	125	11,434	12.63
VEHICLE CONDITION	1,486	597	14	2,097	2.32
TOTAL	62,468	27,601	434	90,503	100.00

MAJOR CONTRIBUTING FACTORS
IN 1989 MOTOR VEHICLE ACCIDENTS

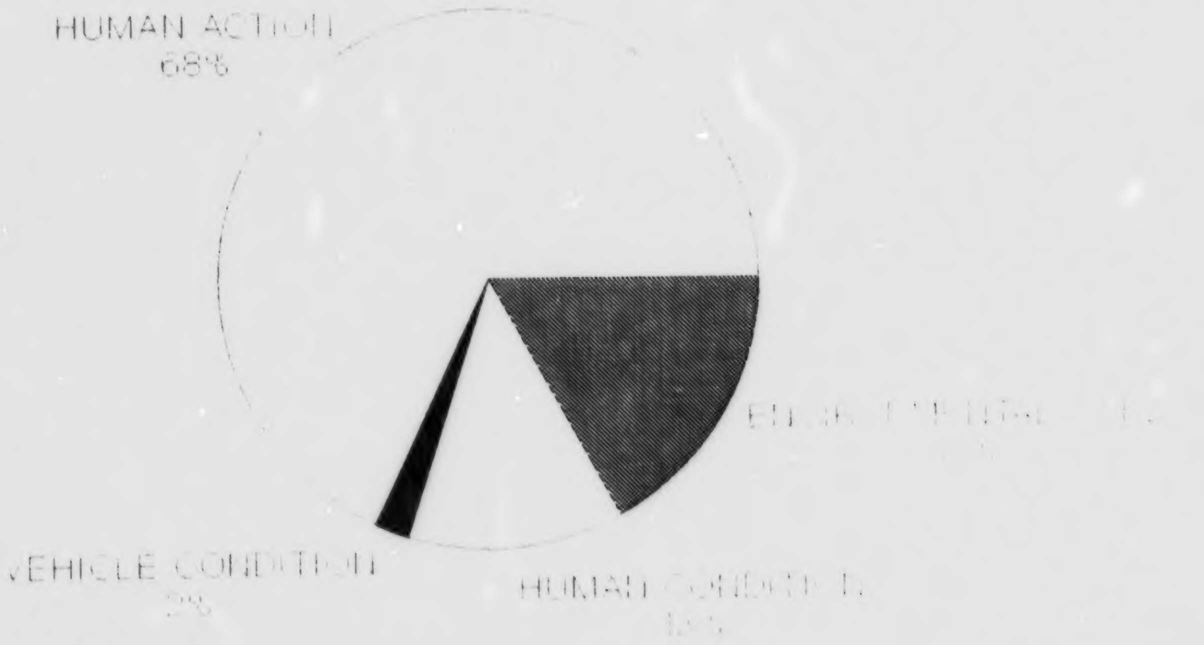


fig. 10

1989 ACCIDENTS WHERE HUMAN CONDITION WAS THE MAJOR CONTRIBUTING FACTOR

HUMAN CONDITION FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
ALCOHOL INVOLVEMENT	4,106	3,011	98	7,215	63.10
DRIVER INEXPERIENCE	2,103	1,102	6	3,121	27.30
FELL ASLEEP	248	280	13	541	4.73
FATIGUE	134	100	2	236	2.06
ILLNESS	51	56	1	108	0.94
UNCONSCIOUS	41	56	1	98	0.86
PHYSICAL DISABILITY	28	16	3	47	0.41
ILLEGAL DRUGS	29	11	0	40	0.35
MEDICATION (LEGAL DRUGS)	19	8	1	28	0.24
TOTAL	6,759	4,550	125	11,434	100.00

1989 ACCIDENTS WHERE HUMAN ACTION WAS THE MAJOR CONTRIBUTING FACTOR

HUMAN ACTION FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	11,011	5,608	74	16,693	26.96
FAILING TO YIELD RIGHT OF WAY	7,464	4,459	37	11,960	19.32
BACKING UNSAFELY	7,461	315	2	7,778	12.56
DRIVING AT UNSAFE SPEED	4,556	2,677	75	7,308	11.80
FOLLOWING TOO CLOSELY	4,294	2,864	1	7,159	11.56
IGNORING TRAFFIC CONTROL DEVICE	1,376	1,209	11	2,596	4.19
IMPROPER TURNING	1,531	421	2	1,954	3.16
CUTTING IN	1,411	324	1	1,736	2.80
AVOIDING VEH/PED/CYCLE	840	416	5	1,261	2.04
IMPROPER PASSING	861	297	10	1,168	1.89
DRIVERLESS VEHICLE	889	77	0	966	1.56
DRIVING ON WRONG SIDE OF ROAD	515	309	24	848	1.37
FAILING TO SIGNAL	254	83	0	337	0.54
PEDESTRIAN ERROR/ CONFUSION	33	61	0	94	0.15
IGNORING OFFICER/ FLAGMAN/GUARD	23	11	0	34	0.05
SUICIDE ATTEMPT	4	11	2	17	0.03
TOTAL	42,523	19,142	244	61,909	100.00

1989 ACCIDENTS WHERE ENVIRONMENTAL CONDITION WAS THE MAJOR CONTRIBUTING FACTOR

ENVIRONMENTAL FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
WEATHER CONDITION	4,861	1,764	24	6,649	44.14
WILD ANIMAL	3,827	350	1	4,178	27.74
VISIBILITY IMPAIRED	717	329	5	1,051	6.98
DOMESTIC ANIMAL	535	124	0	659	4.37
OBSTRUCTION/DEBRIS ON ROAD	449	161	3	613	4.07
ROAD MAINTENANCE/ CONSTRUCTION	411	143	1	555	3.68
PAVEMENT CONDITION	258	112	4	374	2.48
SUNLIGHT GLARE	163	105	2	270	1.79
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	129	78	8	215	1.43
ROAD/INTERSECTION DESIGN	134	47	2	183	1.21
ROADSIDE HAZARD	97	39	1	137	0.91
INSUFFICIENT TRAFFIC CONTROL	63	32	0	95	0.63
ARTIFICIAL GLARE	42	22	0	64	0.42
SIGN OBSTRUCTION	14	6	0	20	0.13
TOTAL	11,700	3,312	51	15,063	100.00

1989 ACCIDENTS WHERE VEHICLE CONDITION WAS THE MAJOR CONTRIBUTING FACTOR

VEHICLE DEFECT/FAILURE	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BRAKES	402	191	5	598	28.52
TIRES	254	119	2	375	17.88
INSECURE LOAD	170	39	0	209	9.97
STEERING	115	43	0	158	7.53
ENGINE	84	41	1	126	6.01
OVERSIZE VEHICLE	96	9	3	108	5.15
TOW HITCH	92	14	0	106	5.05
HEADLIGHTS	51	45	0	96	4.58
ACCELERATOR	63	26	1	90	4.29
BRAKE LIGHTS	47	27	0	74	3.53
TURN SIGNALS	48	14	1	63	3.00
SUSPENSION	37	12	1	50	2.38
RESTRAINT SYSTEM	14	9	0	23	1.10
MODIFIED VEHICLE	5	5	0	10	0.48
WINDSHIELD	6	3	0	9	0.43
DANGEROUS GOODS	2	0	0	2	0.10
TOTAL	1,486	597	14	2,097	100.00

MAJOR CONTRIBUTING FACTORS IN 1989 ACCIDENTS IN ORDER OF MAGNITUDE

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	11,011	5,506	74	16,693	16.55
FAILING TO YIELD RIGHT OF WAY	7,464	4,459	37	11,960	11.86
BACKING UNSAFELY	7,461	315	2	7,778	7.71
DRIVING AT UNSAFE SPEED	4,556	2,677	75	7,308	7.25
ALCOHOL INVOLVEMENT	4,106	3,011	98	7,215	7.15
FOLLOWING TOO CLOSELY	4,294	2,864	1	7,159	7.10
WEATHER CONDITION	4,861	1,764	24	6,649	6.59
WILD ANIMAL	3,827	350	1	4,178	4.14
DRIVER INEXPERIENCE	2,103	1,012	6	3,121	3.09
IGNORING TRAFFIC CONTROL DEVICE	1,376	1,209	11	2,596	2.57
IMPROPER TURNING	1,531	421	2	1,954	1.94
CUTTING IN	1,411	324	1	1,736	1.72
AVOIDING VEH/PED/CYCLE	840	416	5	1,261	1.25
IMPROPER PASSING	861	297	10	1,168	1.16
VISIBILITY IMPAIRED	717	329	5	1,051	1.04
NO DRIVER	889	77	0	966	0.96
OTHER	12,902	5,065	90	18,057	17.00
TOTAL	70,210	30,198	442	100,850	100.00

NOTE: "OTHER" includes factors with less than 900 occurrences.

MAJOR CONTRIBUTING FACTORS BY DRIVER AGE IN 1989 ACCIDENTS

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	% OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
DRIVING WITHOUT DUE CARE	65	563	712	781	777	705	2,561	1,847	2,543	1,432	924	731	652	2,400	16,693	16.55
FAILING TO YIELD RIGHT OF WAY	8	292	425	463	434	384	1,532	1,302	2,050	1,457	1,091	1,098	1,051	373	11,960	11.86
BACKING UNSAFELY	12	196	230	228	227	164	825	840	1,356	939	624	498	322	1,317	7,778	7.71
UNSAFE SPEED	24	349	419	500	530	451	1,429	987	1,126	559	380	177	106	271	7,308	7.25
ALCOHOL INVOLVEMENT	19	66	140	241	340	365	1,589	1,236	1,529	642	287	155	60	546	7,215	7.15
FOLLOWING TOO CLOSELY	2	145	271	342	344	290	1,197	1,019	1,436	835	496	327	182	273	7,159	7.10
WEATHER CONDITION	3	120	202	231	262	242	1,023	932	1,552	982	530	293	127	150	6,649	6.59
WILD ANIMAL	2	37	80	87	118	113	577	569	1,106	738	450	216	80	5	4,178	4.14
DRIVER INEXPERIENCE	109	640	463	311	242	166	364	212	277	121	78	47	33	58	3,121	3.09
IGNORING TRAFFIC CONTROL DEVICE	5	69	75	122	125	91	406	309	461	257	207	188	175	106	2,596	2.57
IMPROPER TURNING	7	48	68	71	74	63	229	216	342	251	191	143	132	119	1,954	1.94
CUTTING IN	2	27	47	58	50	61	209	181	336	197	140	119	93	216	1,736	1.72
AVOIDING VEH/PED/ CYCLE	0	30	40	56	73	49	236	193	266	151	82	55	18	12	1,261	1.25
IMPROPER PASSING	0	22	39	59	66	53	204	155	207	121	68	62	35	77	1,168	1.16
IMPAIRED VISIBILITY	0	18	36	37	42	32	143	142	231	156	108	54	39	13	1,051	1.04
NO DRIVER	0	1	0	2	2	2	12	12	21	23	11	3	2	875	966	0.96
DRIVING ON WRONG SIDE OF ROAD	3	20	31	34	33	32	143	99	170	97	55	39	31	61	848	0.84
DOMESTIC ANIMAL	2	18	32	37	30	32	94	98	160	72	47	19	15	3	659	0.65
OBSTRUCTION/DEBRIS ON ROAD	0	9	9	22	29	36	126	89	108	86	48	24	15	12	613	0.61
OTHER	23	259	385	498	569	476	2,127	2,140	3,203	1,987	1,243	817	544	1,666	15,937	5.56
TOTAL	286	2,929	3,704	4,180	4,367	3,807	15,026	12,578	18,480	11,103	7,060	5,065	3,712	8,553	100,850	100.00

NOTE: This report represents first contributing factors attributed to drivers only - pedestrians are not included. "OTHER" includes those factors with less than 600 occurrences, as well as those unspecified factors not recorded in reports 3.1 to 3.5.

2 YEAR COMPARISON OF MAJOR CONTRIBUTING FACTORS IN FATAL ACCIDENTS

CONTRIBUTING FACTORS	1988		1989	
	TOTAL FACTORS	PERCENT OF TOTAL	TOTAL FACTORS	PERCENT OF TOTAL
ALCOHOL INVOLVEMENT	138	29.61	98	22.27
DRIVING AT UNSAFE SPEED	72	15.45	75	17.05
DRIVING WITHOUT DUE CARE	76	16.31	74	16.82
FAILING TO YIELD RIGHT OF WAY	28	6.01	37	8.41
WEATHER	22	4.72	24	5.45
IGNORING TRAFFIC CONTROL DEVICE	11	2.36	11	2.50
IMPROPER PASSING	7	1.50	10	2.27
DRIVER INEXPERIENCE	8	1.72	6	1.36
AVOIDING VEH/PED/CYCLE	10	2.15	5	1.14
VISIBILITY IMPAIRED	4	0.43	5	1.14
IMPROPER TURNING	4	0.43	2	0.45
BACKING UNSAFELY	1	17.81	2	0.45
FOLLOWING TOO CLOSELY	2	0.21	1	0.24
OTHER	83	7.62	90	20.45
TOTAL	466	100.00	440	100.00

NOTE: In 1989 440 contributing factors were identified as contributing to 491 fatal traffic accidents.

In 1988 466 contributing factors were identified as contributing to 535 fatal traffic accidents.

TOP TEN MAJOR CONTRIBUTING FACTORS IN 1989 ACCIDENTS

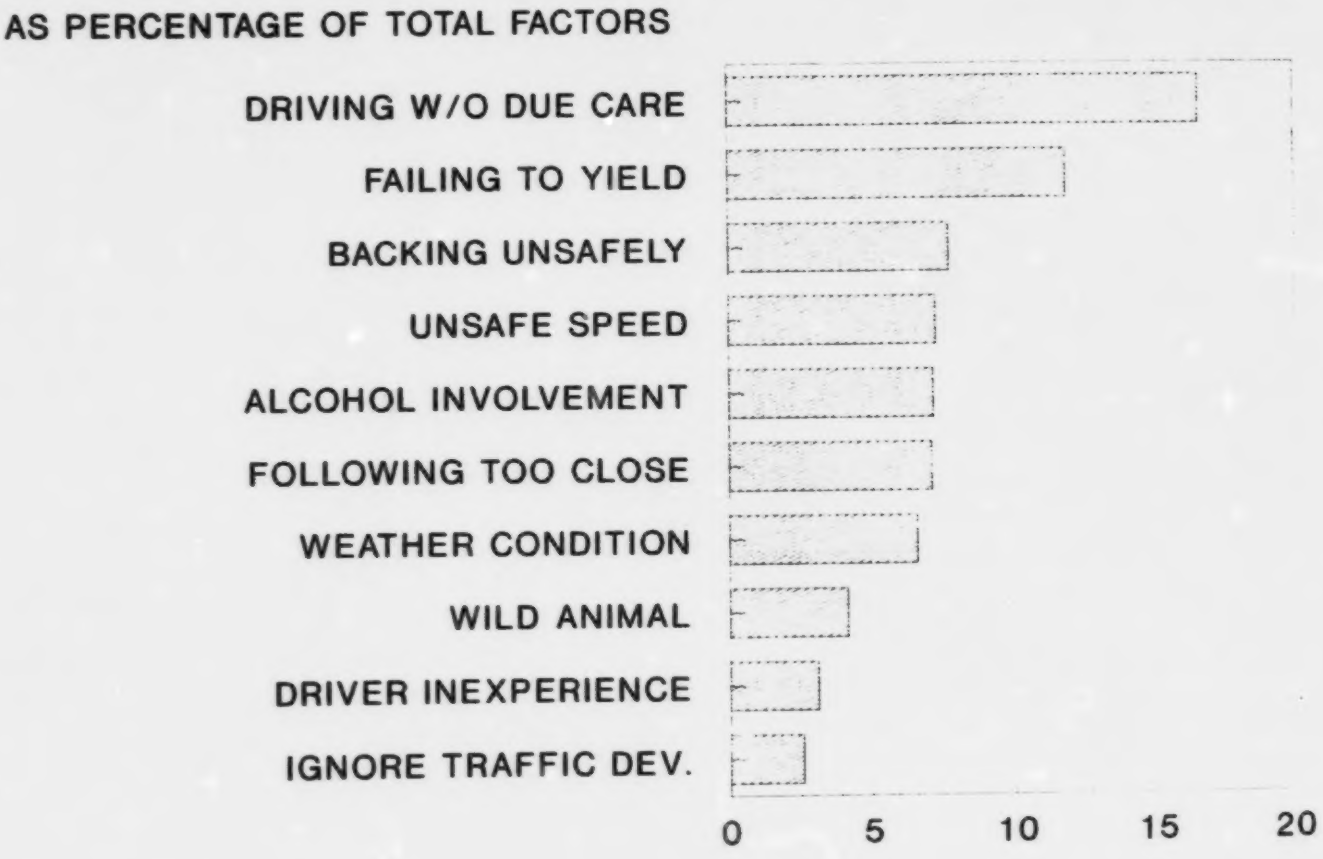


fig. 11

TOP MAJOR CONTRIBUTING FACTORS IN INJURY ACCIDENTS

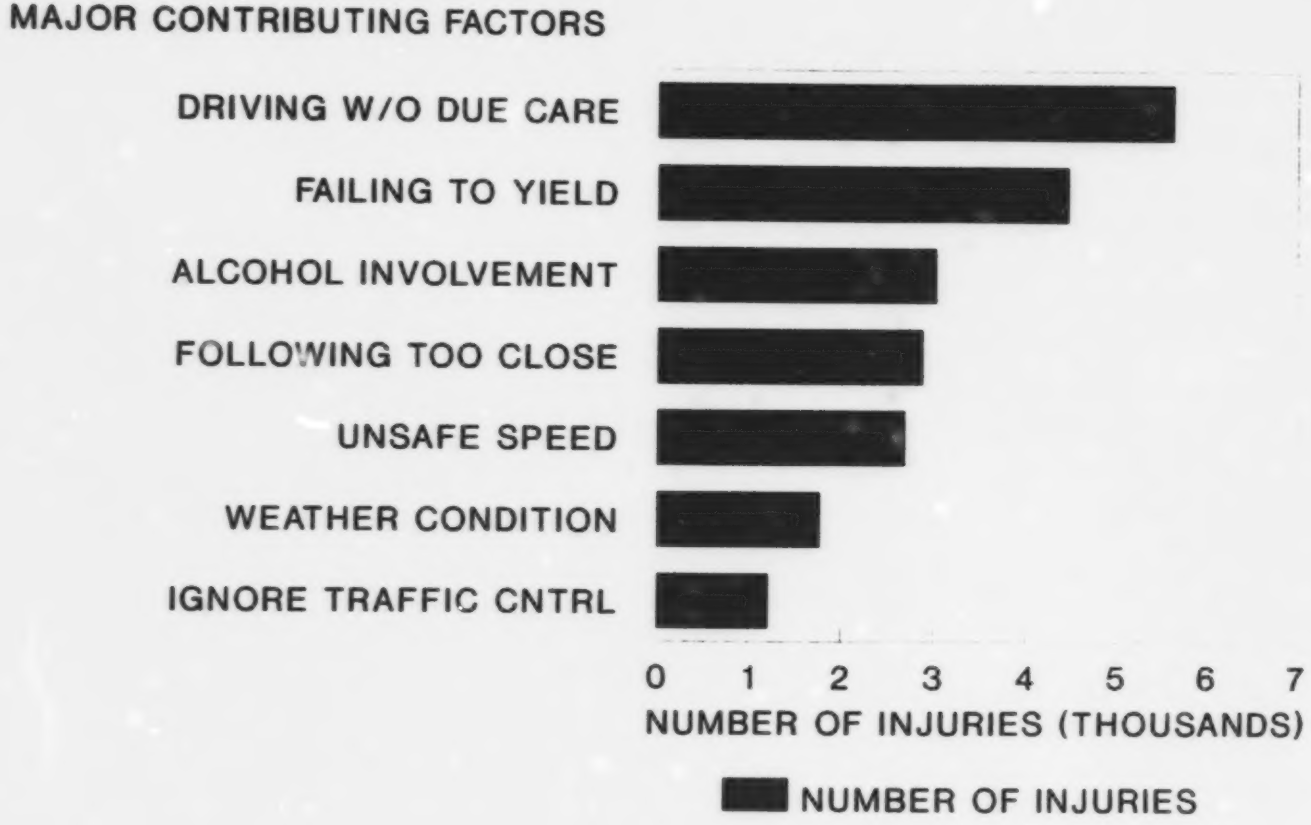


fig. 12

TOP MAJOR CONTRIBUTING FACTORS IN FATAL ACCIDENTS

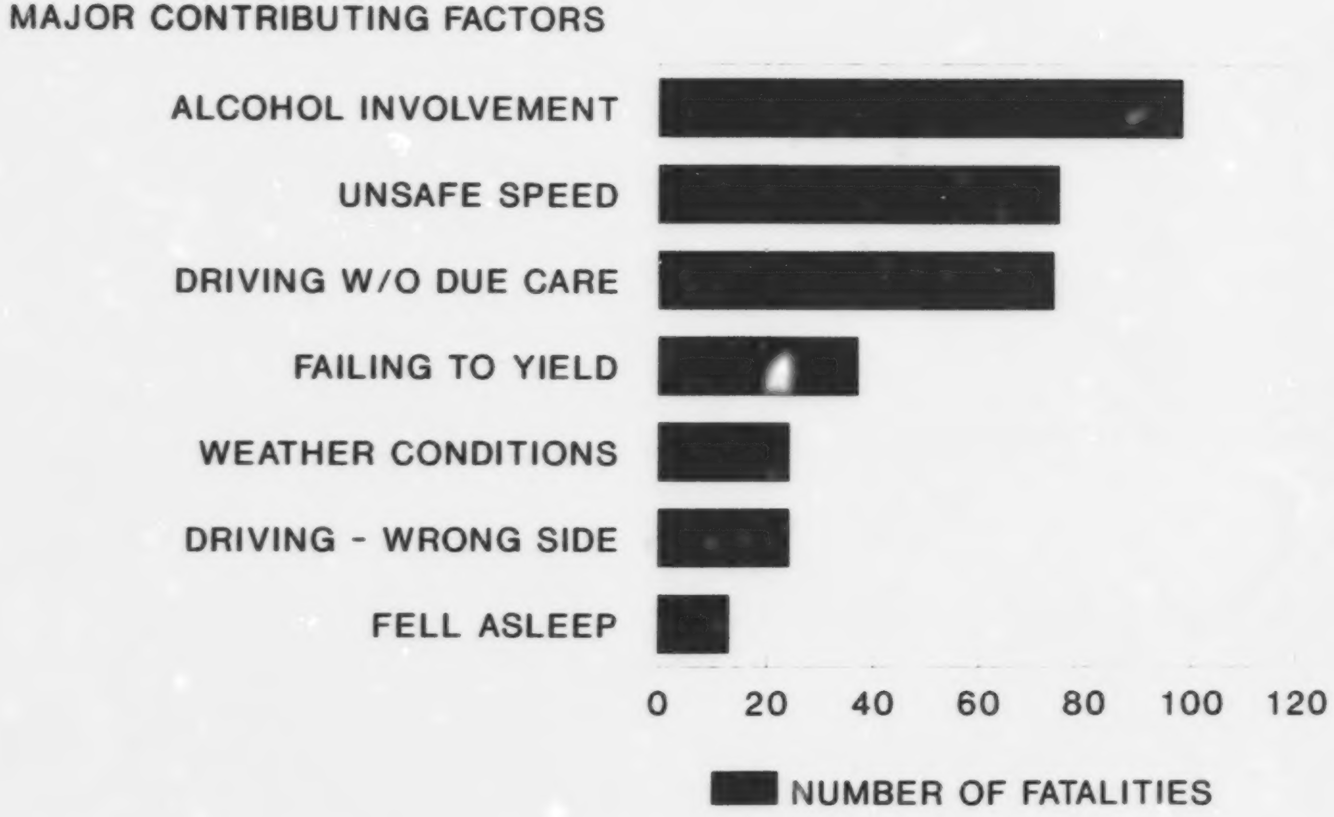


fig. 13

SECTION 4

VICTIMS

1989 ACCIDENTS - VICTIMS

Following the trend in 1988, fatalities in 1989 decreased by 4.5%, while injuries increased by 7.5%.

- 54% of those injured were males, 46% were females; 70% of fatally injured were males.
- 20% of all victims were between 16 and 20 years of age, 2% less than age 6. Ages 16-30 accounted for 48% of all victims.
- With respect to road user class , 54% of casualties were drivers, 32% passengers, 5.6% pedestrians, 4% cyclists, and 3.6% motorcyclists.

The gender breakdown between male and female victims shows males still accounting for a high proportion of injuries and fatalities, although their share of injuries exhibits a downward trend (see graph).

The graphs also indicate the distribution of victims by age. Fatalities and injuries follow similar trends. However, in the age group 1-5 and 61+, the two ends of the spectrum, the fatality rate is higher than the injury rate. Within this early age group, the difference is accounted for almost entirely by "Age 1" newborn to the second year of life, which alone accounts for 2.4% of total deaths. For the ages 6-20, injuries play a smaller role than fatalities.

Although a similar proportion of males and females are involved in injury, males make up a much larger proportion of fatalities through all age groups until the ages 71+.

The distribution of total injuries and fatalities among road user classes is unchanged from the 1988 totals. However, there were some shifts: Motorcycle fatalities decreased from 7.5 to 4.6% of total killed, while injuries decreased by only 0.6% of total injuries. Similarily, cyclist deaths decreased from 4.1% to 1.7% of total killed. The share of passenger deaths, however, increased from 25% to 31% of total fatalities.

1989 INJURED VICTIMS BY ROAD USER CLASS BY MONTH

MONTH	ROAD USER CLASS							TOTAL VICTIMS	PERCENT OF TOTAL
	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLE DRIVER	MOTORCYCLE PASSENGER	OTHER/ UNKNOWN		
JANUARY	2,044	1,181	237	61	23	3	8	3,557	7.49
FEBRUARY	1,855	1,016	200	44	17	4	4	3,140	6.61
MARCH	2,097	1,206	221	76	40	5	6	3,651	7.69
APRIL	1,778	1,055	211	194	139	24	5	3,406	7.17
MAY	1,948	1,182	173	245	163	16	4	3,731	7.86
JUNE	2,068	1,383	184	259	214	45	7	4,160	8.76
JULY	2,046	1,586	175	255	257	44	39	4,402	9.27
AUGUST	2,198	1,583	179	219	234	38	16	4,467	9.41
SEPTEMBER	2,015	1,234	203	245	220	25	7	3,949	8.32
OCTOBER	2,406	1,382	246	150	95	16	7	4,302	9.06
NOVEMBER	2,550	1,407	330	104	40	3	11	4,445	9.36
DECEMBER	2,469	1,424	278	64	24	1	1	4,261	8.98
TOTAL	25,474	15,639	2,637	1,916	1,466	224	115	47,471	100.00

NOTE: **PASSENGER** includes those persons "hanging on" to a vehicle, (120 in 1989)
BICYCLIST includes both drivers and passengers on a bicycle, (1,835 drivers; 81 passengers in 1989)

1989 INJURIES CLASSIFICATION

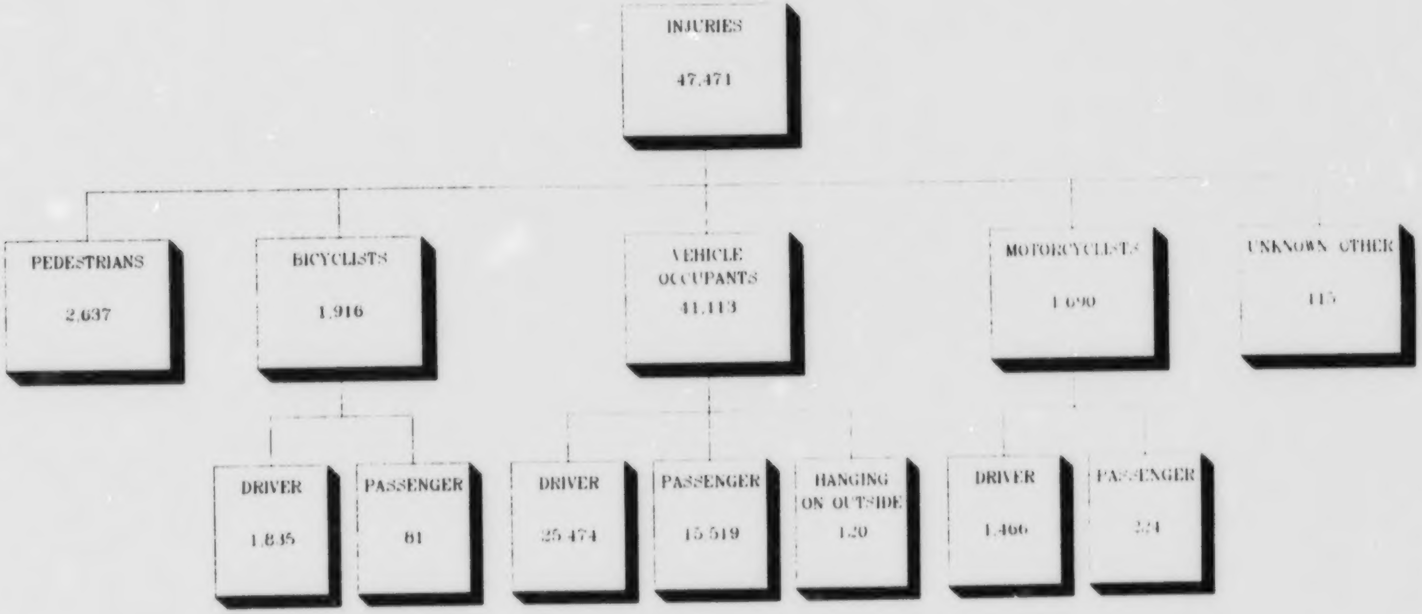

INJURIES
47.471
PEDESTRIANS
2.637
BICYCLISTS
1.916
VEHICLE OCCUPANTS
41.113
MOTORCYCLISTS
1.690
UNKNOWN OTHER
115
DRIVER
1.835
PASSENGER
81
DRIVER
25.474
PASSENGER
15.519
HANGING ON OUTSIDE
120
DRIVER
1.466
PASSENGER
224

fig. 14

1989 FATAL VICTIMS BY ROAD USER CLASS BY MONTH

MONTH	ROAD USER CLASS							TOTAL VICTIMS	PERCENT OF TOTAL
	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLE DRIVER	MOTORCYCLE PASSENGER	OTHER/ UNKNOWN		
JANUARY	19	16	6	2	0	0	1	44	7.50
FEBRUARY	14	16	7	0	1	0	2	40	6.81
MARCH	13	15	5	0	0	0	0	33	5.62
APRIL	11	6	5	3	4	0	0	29	4.94
MAY	17	9	6	1	2	0	2	37	6.30
JUNE	28	24	3	2	5	0	2	64	10.90
JULY	24	16	8	0	8	2	6	64	10.90
AUGUST	30	19	5	0	2	1	1	58	9.88
SEPTEMBER	29	11	11	1	4	1	0	57	9.71
OCTOBER	24	15	6	0	1	0	1	47	8.01
NOVEMBER	26	20	5	1	0	0	0	52	8.86
DECEMBER	29	21	10	0	0	0	2	62	10.56
TOTAL	264	188	77	10	27	4	17	587	100.00

NOTE: **PASSENGER** includes those persons "hanging on" to a vehicle, (4 in 1989)
BICYCLIST includes both drivers and passengers on a bicycle, (10 drivers, 0 passengers in 1989)

1989 FATALITIES CLASSIFICATION

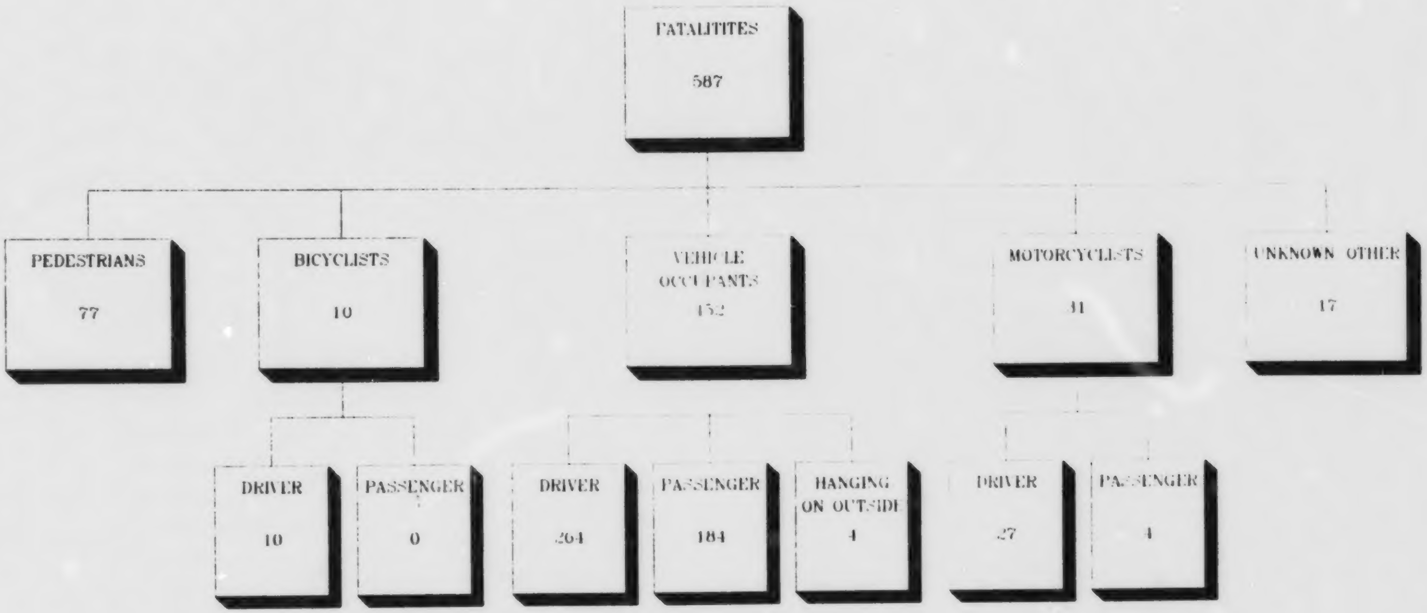

FATALITITES
587
PEDESTRIANS
77
BICYCLISTS
10
VEHICLE OCCUPANTS
452
MOTORCYCLISTS
31
UNKNOWN OTHER
17
DRIVER
10
PASSENGER
0
DRIVER
264
PASSENGER
184
HANGING ON OUTSIDE
4
DRIVER
27
PASSENGER
4

fig. 15

1989 VICTIMS INJURED BY ROAD USER CLASS BY AGE

VICTIM AGE	ROAD USER CLASS							TOTAL VICTIMS	PERCENT OF TOTAL
	DRIVER	PASSENGER	PEDESTRIAN	BICYLIST	MOTORCYCLE DRIVER	MOTORCYCLE PASSENGER	OTHER/ UNKNOWN		
1	0	123	7	1	0	0	3	134	0.28
2	2	118	19	1	0	0	1	141	0.30
3	1	162	17	7	0	0	1	188	0.40
4	3	157	28	10	0	0	3	201	0.42
5	0	180	33	14	0	0	1	228	0.48
6 - 10	7	805	223	231	6	7	4	1,283	2.70
11 - 15	44	1,177	246	424	25	25	8	1,949	4.11
16	564	714	67	80	22	5	2	1,454	3.06
17	815	786	71	65	49	7	5	1,798	3.79
18	1,054	800	61	63	77	15	2	2,072	4.36
19	1,097	703	52	85	86	14	2	2,039	4.30
20	1,056	598	64	71	105	11	5	1,910	4.02
21 - 25	4,377	2,073	249	269	379	41	12	7,400	15.59
26 - 30	3,862	1,449	204	205	237	36	6	5,999	12.64
31 - 35	3,048	951	185	117	191	13	10	4,515	9.51
36 - 40	2,572	728	164	74	120	8	3	3,669	7.73
41 - 45	1,844	602	117	46	69	9	1	2,688	5.66
46 - 50	1,317	507	89	14	46	8	1	1,982	4.18
51 - 55	1,045	421	89	16	24	3	3	1,601	3.37
56 - 60	836	368	85	11	13	1	2	1,316	2.77
61 - 65	645	356	94	16	8	2	1	1,122	2.36
66 - 70	535	323	81	5	2	0	3	949	2.00
71 - 75	333	237	72	4	2	0	0	648	1.37
76 - 80	209	141	67	3	1	0	1	422	0.89
81 - 85	98	76	45	1	0	0	0	220	0.46
86 - 90	22	25	16	0	1	0	0	64	0.13
91 - 95	2	6	3	0	0	0	0	11	0.02
OVER 95	1	4	2	1	0	0	1	9	0.02
UNKNOWN	85	1,049	187	82	3	19	34	1,459	3.07
TOTAL	25,474	15,639	2,637	1,916	1,466	224	115	47,471	100.00

NOTE: PASSENGER includes those persons "hanging on" to a vehicle.
BICYCLIST includes both drivers and passengers on a bicycle.

1989 VICTIMS KILLED BY ROAD USER CLASS BY AGE

VICTIM AGE	ROAD USER CLASS							TOTAL VICTIMS	PERCENT OF TOTAL
	DRIVER	PASSENGER	PEDESTRIAN	BICYLIST	MOTORCYLE DRIVER	MOTORCYCLE PASSENGER	OTHER/ UNKNOWN		
1	0	9	1	0	0	0	4	14	2.39
2	0	1	2	0	0	0	0	3	0.51
3	0	2	2	0	0	0	0	4	0.68
4	0	4	0	0	0	0	0	4	0.68
5	0	1	1	0	0	0	0	2	0.34
6 - 10	0	7	1	0	0	0	0	8	1.36
11 - 15	0	7	3	2	2	0	0	14	2.39
16	2	4	1	0	0	0	2	9	1.53
17	7	11	2	0	0	2	0	22	3.75
18	11	10	1	0	1	0	1	24	4.09
19	12	11	2	0	1	0	1	27	4.60
20	7	6	2	0	3	0	3	21	3.58
21 - 25	45	25	9	1	7	0	3	90	15.33
26 - 30	41	23	6	1	5	0	0	76	12.95
31 - 35	32	9	2	2	2	1	2	50	8.52
36 - 40	24	14	2	1	3	0	0	44	7.50
41 - 45	21	10	3	1	1	0	0	36	6.13
46 - 50	11	4	3	1	2	0	0	21	3.58
51 - 55	12	3	3	0	0	0	0	18	3.07
56 - 60	6	3	9	0	0	1	0	19	3.24
61 - 65	8	3	5	0	0	0	0	16	2.73
66 - 70	10	4	5	0	0	0	0	19	3.24
71 - 75	7	5	3	0	0	0	0	15	2.56
76 - 80	5	7	5	1	0	0	0	18	3.07
81 - 85	3	3	3	0	0	0	1	10	1.70
86 - 90	0	2	0	0	0	0	0	0	0.00
91 - 95	0	0	0	0	0	0	0	0	0.00
OVER 95	0	0	0	0	0	0	0	2	0.34
UNKNOWN	0	0	1	0	0	0	0	1	0.17
TOTAL	264	188	77	10	27	4	17	587	100.00

NOTE: **PASSENGER** includes those persons "hanging on" to a vehicle.
BICYCLIST includes both drivers and passengers on a bicycle.

VICTIMS INJURED AND KILLED BY ROAD USER CLASS BY AGE

VICTIM AGE	ROAD USER CLASS							TOTAL VICTIMS	PERCENT OF TOTAL
	DRIVER	PASSENGER	PEDESTRIAN	BICYCLIST	MOTORCYCLE DRIVER	MOTORCYCLE PASSENGER	OTHER/ UNKNOWN		
1	0	132	8	1	0	0	7	148	0.31
2	2	119	21	1	0	0	1	144	0.30
3	1	164	19	7	0	0	1	192	0.40
4	3	161	28	10	0	0	3	205	0.43
5	0	181	34	14	0	0	1	230	0.48
6 - 10	7	812	224	231	6	7	4	1,291	2.69
11 - 15	44	1,184	249	426	27	25	8	1,963	4.08
16	566	718	68	80	22	5	4	1,463	3.04
17	822	797	73	65	49	9	5	1,820	3.79
18	1,065	810	62	63	78	15	3	2,096	4.36
19	1,109	714	54	85	87	14	3	2,066	4.30
20	1,063	604	66	71	108	11	8	1,931	4.02
21 - 25	4,422	2,098	258	270	386	41	15	7,490	15.59
26 - 30	3,903	1,472	210	206	242	36	6	6,075	12.64
31 - 35	3,080	960	187	119	193	14	12	4,565	9.50
36 - 40	2,596	742	166	75	123	8	3	3,713	7.73
41 - 45	1,865	612	120	47	70	9	1	2,724	5.67
46 - 50	1,328	511	92	15	48	8	1	2,003	4.17
51 - 55	1,057	424	92	16	24	3	3	1,619	3.37
56 - 60	842	371	94	11	13	2	2	1,335	2.78
61 - 65	653	359	99	16	8	2	1	1,138	2.37
66 - 70	545	327	86	5	2	0	3	968	2.01
71 - 75	340	242	75	4	2	0	0	663	1.38
76 - 80	214	148	72	4	1	0	1	440	0.92
81 - 85	101	79	48	1	0	0	1	230	0.48
86 - 90	22	25	16	0	1	0	0	64	0.13
91 - 95	2	8	3	0	0	0	0	13	0.03
OVER 95	1	4	2	1	0	0	1	9	0.02
UNKNOWN	85	1,049	188	82	3	19	34	1,460	3.04
TOTAL	25,738	15,827	2,714	1,926	1,493	228	132	48,058	100.00

NOTE: PASSENGER includes those persons "hanging on" to a vehicle.
BICYCLIST includes both drivers and passengers on a bicycle.

1989 MOTOR VEHICLE ACCIDENT VICTIMS INJURED AND KILLED BY AGE AND SEX

VICTIMS INJURED					VICTIMS KILLED			
AGE	MALE	FEMALE	UNKNOWN	TOTAL INJURED	MALE	FEMALE	UNKNOWN	TOTAL KILLED
1	73	59	2	134	6	4	4	14
2	77	64	0	141	1	2	0	3
3	100	88	0	188	3	1	0	4
4	106	95	0	201	3	1	0	4
5	124	104	0	228	2	0	0	2
6 - 10	719	562	2	1,283	6	2	0	8
11 - 15	974	972	3	1,949	12	2	0	14
16	735	718	1	1,454	6	3	0	9
17	1,017	779	2	1,798	16	6	0	22
18	1,244	828	0	2,072	17	7	0	24
19	1,249	789	1	2,039	20	7	0	27
20	1,159	751	0	1,910	15	6	0	21
21 - 25	4,415	2,981	4	7,400	72	18	0	90
26 - 30	3,439	2,558	2	5,999	61	15	0	76
31 - 35	2,536	1,978	1	4,515	34	16	0	50
36 - 40	1,854	1,815	0	3,669	31	13	0	44
41 - 45	1,315	1,371	2	2,688	25	11	0	36
46 - 50	972	1,008	2	1,982	16	5	0	21
51 - 55	771	829	1	1,601	10	8	0	18
56 - 60	649	667	0	1,316	11	8	0	19
61 - 65	533	588	1	1,122	10	6	0	16
66 - 70	392	556	1	949	14	5	0	19
71 - 75	290	358	0	648	5	10	0	15
76 - 80	185	237	0	422	7	11	0	18
81 - 85	118	102	0	220	4	6	0	10
86 - 90	33	30	1	64	0	0	0	0
91 - 95	5	5	1	11	0	2	0	2
OVER 95	5	4	0	9	0	0	0	0
UNKNOWN	637	727	95	1,459	0	0	1	1
TOTAL	25,726	21,623	122	47,471	407	175	5	587

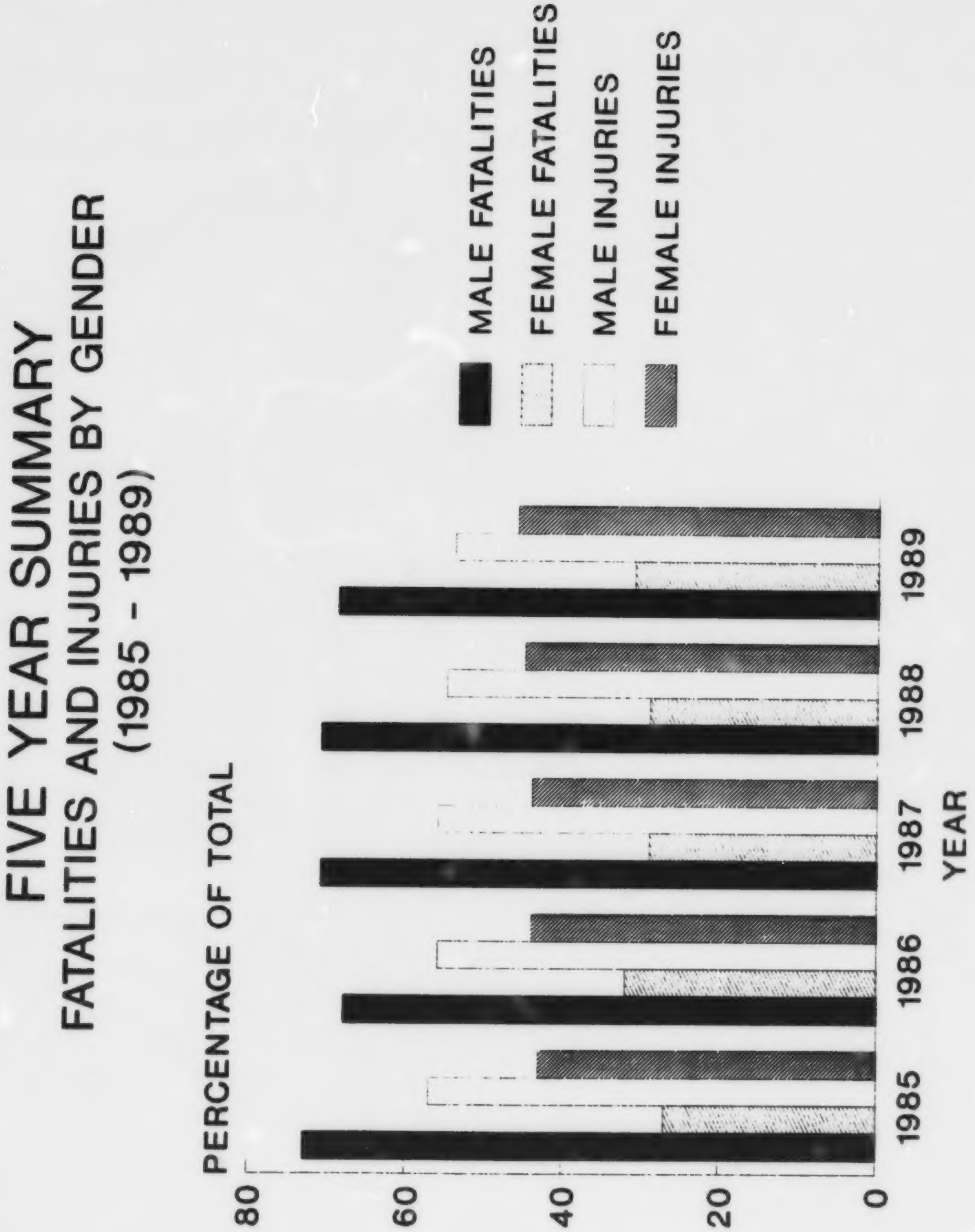

FIVE YEAR SUMMARY
FATALITIES AND INJURIES BY GENDER
(1985 - 1989)
PERCENTAGE OF TOTAL
80
60
40
20
0
1985
1986
1987
1988
1989
YEAR
MALE FATALITIES
FEMALE FATALITIES
MALE INJURIES
FEMALE INJURIES

fig. 16

1989 VICTIMS BY DAY OF WEEK BY VICTIM AGE

VICTIM AGE	DAY OF WEEK							TOTAL VICTIMS
	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.	
1	22	22	21	18	23	26	16	148
2	21	16	19	12	24	29	23	144
3	26	30	27	22	34	31	22	192
4	36	21	26	23	37	27	35	205
5	29	29	28	28	37	40	39	230
6 - 10	209	125	161	178	179	198	241	1,291
11 - 15	283	232	239	248	272	341	348	1,963
16	212	169	181	180	170	282	269	1,463
17	280	211	194	216	214	337	368	1,820
18	323	264	206	270	255	357	421	2,096
19	325	266	218	254	259	353	391	2,066
20	311	224	225	228	281	322	340	1,931
21 - 25	1,122	927	831	911	990	1,327	1,382	7,490
26 - 30	791	721	780	797	827	1,134	1,025	6,075
31 - 35	560	570	602	667	655	771	740	4,565
36 - 40	442	510	503	505	552	663	538	3,713
41 - 45	340	364	363	372	391	492	402	2,724
46 - 50	227	276	255	287	307	374	277	2,003
51 - 55	170	220	214	235	238	284	258	1,619
56 - 60	147	206	179	196	202	216	189	1,335
61 - 65	133	157	163	170	168	190	157	1,138
66 - 70	136	137	141	135	130	146	143	968
71 - 75	99	98	79	95	92	102	98	663
76 - 80	53	53	66	69	59	85	55	440
81 - 85	29	25	36	39	37	37	27	230
86 - 90	15	5	7	9	5	13	10	64
91 - 95	2	3	4	0	1	1	2	13
OVER 95	2	1	0	1	1	0	4	9
UNKNOWN	245	157	193	201	188	221	255	1,460
TOTAL	6,590	6,039	5,961	6,366	6,628	8,399	8,075	48,058

DISTRIBUTION OF FATALITIES AND INJURIES BY AGE GROUP

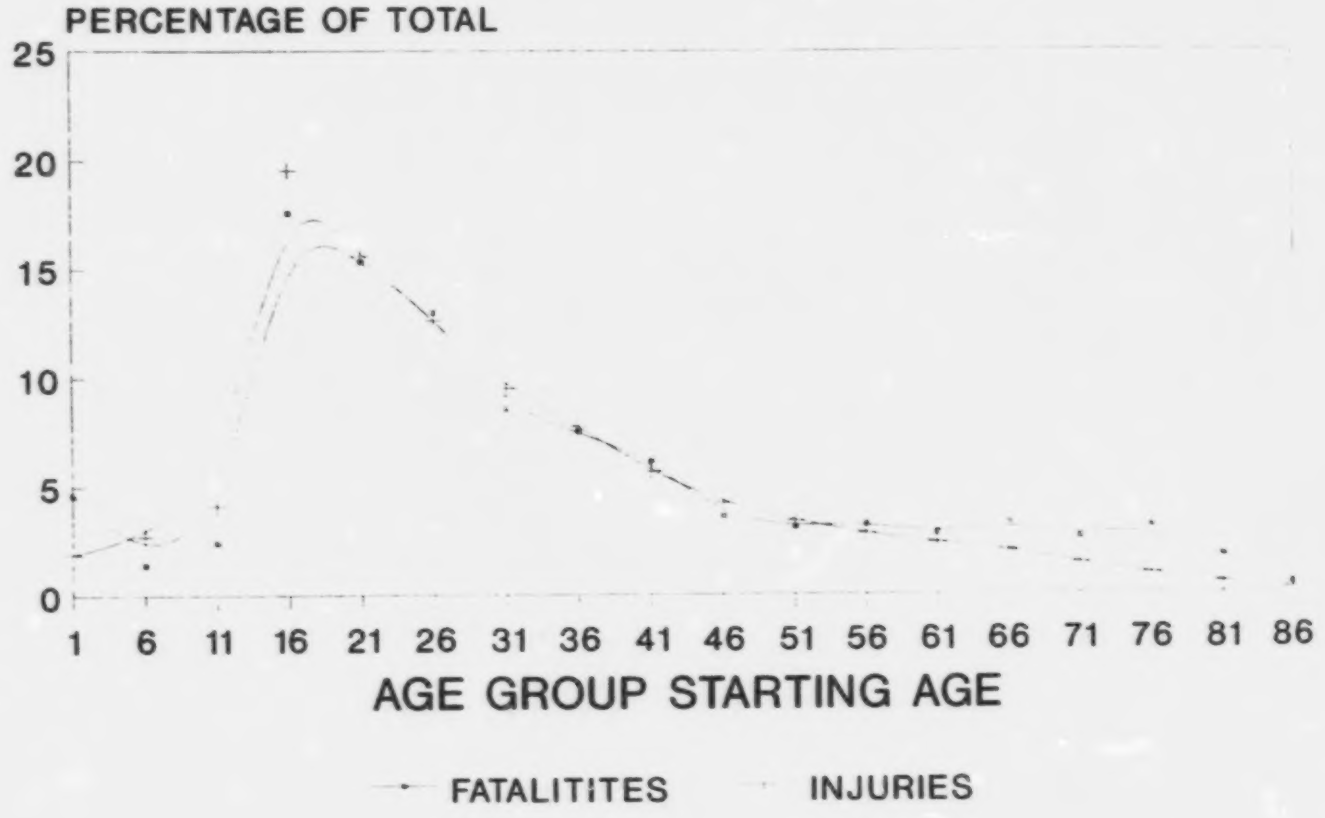


fig. 17

VICTIM AGE BY ACCIDENT HOUR FOR VICTIMS INJURED IN 1989 ACCIDENTS

ACCIDENT HOUR	VICTIM AGE									
	UNK.	1-5	6-10	11-15	16	17	18	19	20	21-25
Mid. - 1 am	37	3	2	40	60	102	107	92	74	273
1 am - 2 am	37	6	5	34	52	70	102	82	73	305
2 am - 3 am	63	2	0	15	21	67	75	101	92	378
3 am - 4 am	31	2	2	15	18	39	58	63	57	191
4 am - 5 am	10	2	3	11	15	25	34	38	33	113
5 am - 6 am	13	1	0	7	8	24	14	26	37	106
6 am - 7 am	16	2	4	8	6	13	28	24	32	102
7 am - 8 am	22	8	14	34	21	30	50	54	53	230
8 am - 9 am	52	32	72	94	48	57	78	66	74	252
9 am -10 am	36	30	38	33	26	41	40	43	53	174
10 am -11 am	40	53	52	41	21	39	45	47	48	217
11 am - Noon	53	66	42	56	38	53	65	50	68	255
Noon - 1 pm	83	67	69	88	88	89	91	79	83	336
1 pm - 2 pm	53	71	79	91	48	62	86	78	79	361
2 pm - 3 pm	57	66	85	108	74	115	113	80	96	376
3 pm - 4 pm	95	80	156	187	111	134	138	125	111	399
4 pm - 5 pm	100	72	142	155	100	112	134	122	120	522
5 pm - 6 pm	92	67	109	178	84	125	143	146	115	498
6 pm - 7 pm	76	44	79	134	74	70	76	99	76	394
7 pm - 8 pm	58	49	60	114	71	109	114	98	88	354
8 pm - 9 pm	43	30	43	90	84	101	105	83	84	335
9 pm -10 pm	40	21	37	93	82	115	113	93	76	317
10 pm -11 pm	51	12	11	70	82	123	117	106	55	268
11 pm - Mid.	38	8	11	64	83	95	111	82	87	277
UNKNOWN	38	4	13	32	23	27	29	28	31	127
TOTAL	1,234	798	1,128	1,792	1,338	1,837	2,066	1,905	1,795	7,160

cont'd...

VICTIM AGE BY ACCIDENT HOUR FOR VICTIMS INJURED IN 1989 ACCIDENTS

cont'd

ACCIDENT HOUR	VICTIM AGE							TOTAL INJURED	PERCENT OF TOTAL
	26-30	31-40	41-50	51-60	61-70	71-80	81+		
Mid. - 1 am	155	167	68	38	21	3	0	1,245	2.82
1 am - 2 am	180	158	62	24	7	4	1	1,207	2.73
2 am - 3 am	171	156	43	13	6	0	0	1,183	2.68
3 am - 4 am	89	76	23	18	2	2	1	685	1.55
4 am - 5 am	60	60	19	13	1	1	0	438	0.99
5 am - 6 am	58	46	17	15	1	0	0	367	0.83
6 am - 7 am	98	147	88	56	19	8	2	652	1.48
7 am - 8 am	189	292	144	93	33	16	4	1,292	2.93
8 am - 9 am	248	399	215	136	64	21	10	1,903	4.31
9 am -10 am	193	314	191	112	86	54	7	1,468	3.32
10 am -11 am	183	300	201	158	142	77	18	1,679	3.80
11 am - Noon	239	347	239	199	160	109	28	2,079	4.71
Noon - 1 pm	276	411	234	187	144	96	24	2,430	5.50
1 pm - 2 pm	256	428	250	173	173	95	24	2,419	5.48
2 pm - 3 pm	311	426	274	233	182	123	25	2,774	6.28
3 pm - 4 pm	350	529	347	227	176	103	36	3,291	7.45
4 pm - 5 pm	423	591	389	284	195	98	18	3,594	8.14
5 pm - 6 pm	359	600	361	225	142	64	21	3,315	7.51
6 pm - 7 pm	314	445	246	159	95	54	14	2,460	5.57
7 pm - 8 pm	261	355	196	144	77	41	12	2,210	5.00
8 pm - 9 pm	238	297	158	96	39	30	6	1,871	4.24
9 pm -10 pm	202	318	173	91	48	26	5	1,855	4.20
10 pm -11 pm	204	239	111	68	39	31	8	1,606	3.64
11 pm - Mid.	205	201	120	53	28	10	1	1,478	3.35
UNKNOWN	94	92	73	49	12	8	2	660	1.49
TOTAL	5,356	7,394	4,242	2,864	1,892	1,074	267	44,161	100.00

VICTIM AGE BY ACCIDENT HOUR FOR VICTIMS KILLED IN 1989 ACCIDENTS

ACCIDENT HOUR	VICTIM AGE									
	UNK.	1-5	6-10	11-15	16	17	18	19	20	21-25
Mid. - 1 am	0	0	0	2	0	2	2	3	0	9
1 am - 2 am	0	1	0	0	0	1	1	1	3	7
2 am - 3 am	0	0	0	0	1	1	3	6	2	8
3 am - 4 am	0	0	0	0	0	2	0	1	0	6
4 am - 5 am	0	0	0	0	0	0	1	0	2	3
5 am - 6 am	0	0	0	0	0	1	2	3	2	0
6 am - 7 am	0	2	0	0	0	0	0	0	0	3
7 am - 8 am	0	1	0	1	0	0	1	0	2	3
8 am - 9 am	0	0	0	1	0	0	0	1	0	4
9 am -10 am	0	0	0	0	1	1	2	0	0	0
10 am -11 am	0	1	0	0	0	0	0	1	0	0
11 am - Noon	0	0	0	2	0	1	1	0	0	1
Noon - 1 pm	0	2	0	0	0	0	0	1	1	2
1 pm - 2 pm	0	1	0	0	0	2	0	0	0	1
2 pm - 3 pm	0	2	0	0	1	0	0	1	0	3
3 pm - 4 pm	1	4	0	0	1	3	1	0	1	3
4 pm - 5 pm	0	0	0	1	0	2	1	0	1	3
5 pm - 6 pm	0	3	1	2	1	1	0	0	0	6
6 pm - 7 pm	0	3	0	1	0	2	0	1	2	5
7 pm - 8 pm	0	5	2	0	2	0	2	2	3	2
8 pm - 9 pm	0	1	1	0	0	0	0	1	0	5
9 pm -10 pm	0	0	0	0	1	1	3	2	0	3
10 pm -11 pm	0	0	0	1	1	2	1	2	0	2
11 pm - Mid.	0	1	2	1	0	0	3	1	2	9
UNKNOWN	0	0	0	1	0	0	0	0	0	2
TOTAL	1	27	8	14	9	22	24	27	21	90

cont'd...

VICTIM AGE BY ACCIDENT HOUR FOR VICTIMS KILLED IN 1989 ACCIDENTS

cont'd...

ACCIDENT HOUR	VICTIM AGE							TOTAL KILLED	PERCENT OF TOTAL
	26-30	31-40	41-50	51-60	61-70	71-80	81+		
Mid. - 1 am	3	3	2	4	0	0	0	30	5.12
1 am - 2 am	3	4	3	0	0	0	0	24	4.10
2 am - 3 am	4	6	5	0	1	0	0	37	6.28
3 am - 4 am	4	1	2	0	0	0	0	16	2.72
4 am - 5 am	5	2	2	1	0	0	0	16	2.72
5 am - 6 am	5	0	3	1	0	0	0	17	2.87
6 am - 7 am	1	3	4	0	1	0	0	14	2.38
7 am - 8 am	1	4	1	0	0	1	0	15	2.55
8 am - 9 am	0	6	1	0	0	1	0	14	2.38
9 am -10 am	2	1	2	0	3	2	1	15	2.55
10 am -11 am	3	7	0	2	4	3	0	21	3.57
11 am - Noon	4	2	0	1	0	1	1	16	2.72
Noon - 1 pm	4	3	3	2	3	3	2	27	4.58
1 pm - 2 pm	0	5	2	3	0	2	2	18	3.06
2 pm - 3 pm	4	1	1	2	3	6	0	24	4.10
3 pm - 4 pm	1	7	7	2	5	4	1	41	6.96
4 pm - 5 pm	3	8	1	4	6	1	2	33	5.60
5 pm - 6 pm	8	4	4	2	3	5	2	42	7.33
6 pm - 7 pm	2	5	5	4	1	0	0	31	5.26
7 pm - 8 pm	8	6	2	0	0	0	1	35	5.98
8 pm - 9 pm	0	6	2	1	0	3	0	20	3.40
9 pm -10 pm	5	3	3	1	2	0	0	24	4.10
10 pm -11 pm	1	6	2	1	2	1	0	22	3.73
11 pm - Mid.	5	1	0	4	0	0	0	29	4.92
UNKNOWN	0	0	0	2	1	0	0	6	1.02
TOTAL	76	94	57	37	35	33	12	589	100.00

VICTIMS IN 1989 HOLIDAY ACCIDENTS

HOLIDAY	VICTIM TYPE		TOTAL VICTIMS	PERCENT OF TOTAL
	INJURED	KILLED		
REMEMBRANCE DAY	570	8	578	14.93
B. C. DAY	508	15	523	13.51
CANADA DAY	478	10	488	12.60
LABOUR DAY	467	7	474	12.24
VICTORIA DAY	431	8	439	11.34
EASTER	429	2	431	11.13
THANKSGIVING	355	10	365	9.43
CHRISTMAS	298	2	300	7.75
NEW YEAR'S EVE/DAY	272	2	274	7.08
TOTAL	3,808	64	3,872	100.00

NOTE: New Year's Eve/Day is December 31, 1988 and January 1, 1989.

SECTION 5

PEDESTRIANS

1989 ACCIDENTS - PEDESTRIANS

The 2,648 pedestrians injured in 1989 constitute a 6% increase over 1988. The pedestrian fatal total of 87 is 3 fewer than in 1988.

Of all pedestrian involved accidents, 28.6% occurred between 15:00 and 18:00 hours. The most common pedestrian actions were, in descending order: crossing a street without the aid of a signal or marked crosswalk; crossing at a marked crosswalk without a signal; and crossing without a signal.

The highest incidence of injury occurred in the 16-30 age group. However, 1-15 year old pedestrians accounted for a relatively greater proportion of injuries. The distribution of fatalitites has three peaks: the 1-5 age group, the 16-25 age group and the 56+ group. Only in the first and last groups is there a much larger proportion of deaths to the number of accidents.

The distribution of accident hour is the same as 1988 figures, with most accidents occurring from 12:00 to 21:00 hours. The highest incidence of accidents was in the 15:00 hour. Almost 9% of all pedestrian injuries involved 6-15 year olds, between 15:00 and 19:00 hours.

As has historically been the case, all three accident types have the highest incidence levels on the weekend. Property damage and personal injury accidents occur most frequently on Fridays. Over 25% of fatalities occur on Saturdays.

PEDESTRIANS INVOLVED IN 1989 ACCIDENTS BY LOCATION BY PEDESTRIAN ACTION AND ACCIDENT TYPE

PEDESTRIAN ACTION	AT INTERSECTION				NOT AT INTERSECTION			
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL	TOTAL	PROPERTY DAMAGE	PERSONAL INJURY	FATAL	TOTAL
CROSSING WITH NO SIGNAL, NO CROSWALK	3	241	6	250	11	383	20	414
CROSSING AT MARKED CROSSWALK, NO SIGNAL	2	315	6	323	0	38	1	39
CROSSING WITH SIGNAL	4	331	2	337	0	3	0	3
EMERGING FROM FRONT/BEHIND PARKED VEHICLE	0	12	0	12	3	150	3	156
CROSSING AGAINST SIGNAL	2	95	1	98	1	10	0	11
WALKING WITH TRAFFIC	0	10	0	10	2	83	8	93
PLAYING IN ROADWAY	0	14	1	15	1	54	2	57
STANDING ON SIDEWALK	0	17	1	18	0	54	0	54
WALKING AGAINST TRAFFIC	0	12	1	13	1	42	2	45
WORKING IN ROADWAY	0	8	0	8	0	35	1	36
ADULT GETTING ON/OFF VEHICLE	0	6	0	6	0	28	1	29
PUSHING/WORKING ON A CAR	0	1	0	1	0	22	0	22
CHILD GETTING ON/OFF SCHOOL VEHICLE	0	5	0	5	0	6	0	6
OTHER	6	159	2	167	11	309	25	345
UNKNOWN	3	44	2	49	1	39	2	42
TOTAL	20	1,270	22	1,312	31	1,256	65	1,352

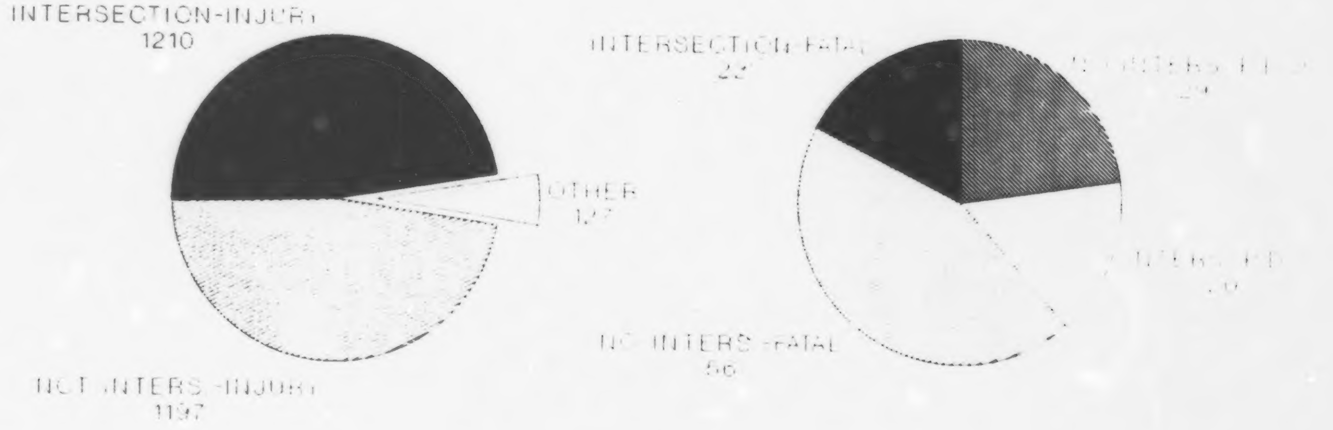
cont'd...

PEDESTRIANS INVOLVED IN 1989 ACCIDENTS BY LOCATION BY PEDESTRIAN ACTION AND ACCIDENT TYPE

cont'd...

PEDESTRIAN ACTION	UNKNOWN				TOTAL PEDESTRIANS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL	TOTAL		
CROSSING WITH NO SIGNAL, NO CROSSWALK	0	6	0	6	670	23.98
CROSSING AT MARKED CROSSWALK, NO SIGNAL	0	3	0	3	365	13.06
CROSSING WITH SIGNAL	0	0	0	0	340	12.17
EMERGING FROM FRONT/BEHIND PARKED VEHICLE	0	2	0	2	170	6.08
CROSSING AGAINST SIGNAL	0	3	0	3	112	4.01
WALKING WITH TRAFFIC	0	1	0	1	104	3.72
PLAYING IN ROADWAY	0	1	0	1	73	2.61
STANDING ON SIDEWALK	0	1	0	1	73	2.61
WALKING AGAINST TRAFFIC	0	0	0	0	58	2.08
WORKING IN ROADWAY	0	2	0	2	46	1.65
ADULT GETTING ON/OFF VEHICLE	0	0	0	0	35	1.25
PUSHING/WORKING ON A CAR	0	0	0	0	23	0.82
CHILD GETTING ON/OFF SCHOOL VEHICLE	0	0	0	0	11	0.39
OTHER	4	29	0	33	545	19.51
UNKNOWN	4	74	0	78	169	6.05
TOTAL	8	122	0	130	2,794	100.00

TOTAL PEDESTRIANS INVOLVED BY LOCATION AND ACCIDENT TYPE



P.D.O. - PROPERTY DAMAGE ONLY

fig. 18

1989 PEDESTRIAN INVOLVED ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

-PROPERTY DAMAGE ACCIDENTS ONLY-

ACCIDENT HOUR	DAY OF WEEK							TOTAL ACCIDENTS	PERCENT OF TOTAL
	SUN	MON	TUES	WED	THURS	FRI	SAT		
Mid. - 1 am	1	0	0	0	0	1	0	2	3.51
1 am - 2 am	1	0	0	0	0	0	0	1	1.75
2 am - 3 am	0	0	0	0	0	0	0	0	0.00
3 am - 4 am	0	0	0	0	0	0	0	0	0.00
4 am - 5 am	0	0	0	0	0	0	0	0	0.00
5 am - 6 am	0	0	0	0	0	0	0	0	0.00
6 am - 7 am	0	0	0	1	0	0	0	1	1.75
7 am - 8 am	0	0	0	1	0	0	1	2	3.51
8 am - 9 am	0	0	1	0	0	1	0	2	3.51
9 am - 10 am	0	1	0	0	1	1	0	3	5.26
10 am - 11 am	0	0	0	1	0	1	0	2	3.51
11 am - Noon	0	0	0	1	0	0	1	2	3.51
Noon - 1 pm	0	0	0	0	0	0	2	2	3.51
1 pm - 2 pm	0	0	0	0	1	0	0	1	1.75
2 pm - 3 pm	1	0	0	0	1	0	0	2	3.51
3 pm - 4 pm	0	0	4	0	1	3	0	8	14.04
4 pm - 5 pm	0	0	1	1	0	1	1	4	7.02
5 pm - 6 pm	0	2	0	0	1	0	0	3	5.26
6 pm - 7 pm	0	1	1	0	0	1	0	3	5.26
7 pm - 8 pm	0	0	2	1	0	1	0	4	7.02
8 pm - 9 pm	0	2	0	1	1	0	0	4	7.02
9 pm - 10 pm	0	1	0	0	1	0	0	2	3.51
10 pm - 11 pm	0	0	1	0	0	0	0	1	1.75
11 pm - Mid.	0	0	1	0	0	2	0	3	5.26
UNKNOWN	1	1	0	0	1	2	0	5	8.78
TOTAL	4	8	11	7	8	14	5	57	100.00

1989 PEDESTRIAN INVOLVED ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

-PERSONAL INJURY ACCIDENTS ONLY-

ACCIDENT HOUR	DAY OF WEEK							TOTAL ACCIDENTS	PERCENT OF TOTAL
	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.		
Mid. - 1 am	10	3	4	1	8	7	14	47	1.86
1 am - 2 am	18	1	1	1	5	4	17	47	1.86
2 am - 3 am	25	2	5	5	4	9	24	74	2.93
3 am - 4 am	7	0	2	1	0	3	9	22	0.87
4 am - 5 am	2	0	0	1	1	1	4	9	0.36
5 am - 6 am	0	0	1	0	0	0	2	3	0.12
6 am - 7 am	1	4	5	5	6	2	4	27	1.07
7 am - 8 am	0	9	10	18	12	7	4	60	2.38
8 am - 9 am	3	13	14	19	20	21	3	93	3.68
9 am - 10 am	4	9	20	16	16	14	7	86	3.41
10 am - 11 am	9	17	16	16	17	15	18	108	4.28
11 am - Noon	12	12	19	20	16	19	27	125	4.95
Noon - 1 pm	9	15	15	22	26	25	20	132	5.23
1 pm - 2 pm	12	13	17	31	20	28	29	150	5.94
2 pm - 3 pm	10	17	22	22	22	28	23	144	5.70
3 pm - 4 pm	12	30	54	52	49	51	23	271	10.73
4 pm - 5 pm	19	26	34	34	32	47	16	208	8.24
5 pm - 6 pm	16	35	37	33	54	38	23	236	9.35
6 pm - 7 pm	16	27	20	20	34	34	17	168	6.65
7 pm - 8 pm	8	15	17	26	21	25	21	133	5.27
8 pm - 9 pm	11	14	13	14	18	21	16	107	4.24
9 pm - 10 pm	9	12	13	12	12	18	16	92	3.64
10 pm - 11 pm	11	10	14	5	11	12	14	77	3.05
11 pm - Mid.	5	7	7	9	5	19	12	64	2.53
UNKNOWN	3	6	6	3	5	10	9	42	1.66
TOTAL	232	297	366	386	414	458	372	2,525	100.00

1989 PEDESTRIAN INVOLVED ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

-FATAL ACCIDENTS ONLY-

ACCIDENT HOUR	DAY OF WEEK							TOTAL ACCIDENTS	PERCENT OF TOTAL
	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.		
Mid. - 1 am	0	1	0	0	0	2	3	5	6.41
1 am - 2 am	0	0	0	1	1	1	1	4	5.13
2 am - 3 am	1	0	0	0	1	0	3	5	6.41
3 am - 4 am	1	0	1	0	0	0	0	2	2.56
4 am - 5 am	0	0	0	0	0	0	0	0	0.00
5 am - 6 am	2	0	0	0	0	0	0	2	2.56
6 am - 7 am	0	0	0	1	1	0	0	2	2.56
7 am - 8 am	0	1	0	0	1	1	0	3	3.85
8 am - 9 am	0	1	0	1	0	0	0	2	2.56
9 am - 10 am	0	1	0	1	0	1	0	3	3.85
10 am - 11 am	1	0	0	0	1	0	1	3	3.85
11 am - Noon	0	0	0	1	0	0	0	1	1.28
Noon - 1 pm	0	1	0	0	0	0	1	2	2.56
1 pm - 2 pm	0	0	0	0	0	0	0	0	0.00
2 pm - 3 pm	0	0	1	0	0	0	0	1	1.28
3 pm - 4 pm	0	1	2	1	1	0	1	7	8.98
4 pm - 5 pm	0	2	0	1	0	0	2	5	6.41
5 pm - 6 pm	0	0	0	2	1	1	2	6	7.69
6 pm - 7 pm	1	2	2	0	0	0	1	6	7.69
7 pm - 8 pm	0	0	1	1	0	0	0	2	2.56
8 pm - 9 pm	1	1	0	0	0	0	1	3	3.85
9 pm - 10 pm	1	0	1	0	0	1	2	5	6.41
10 pm - 11 pm	0	0	0	0	0	1	2	3	3.85
11 pm - Mid.	0	2	0	0	1	1	0	4	5.13
UNKNOWN	1	0	0	0	1	0	0	2	2.56
TOTAL	9	13	8	10	9	9	20	78	100.00

PEDESTRIAN INVOLVED ACCIDENTS
BY DAY OF WEEK

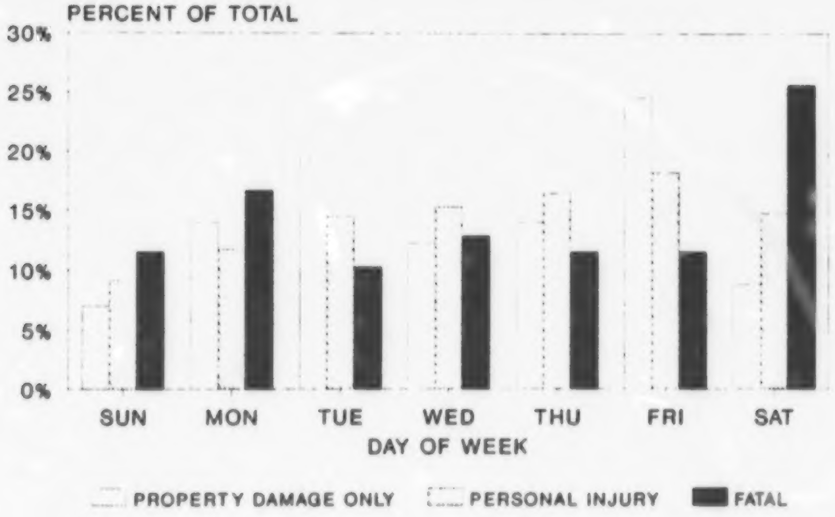


fig. 19

PEDESTRIAN INVOLVED ACCIDENTS
BY ACCIDENT HOUR

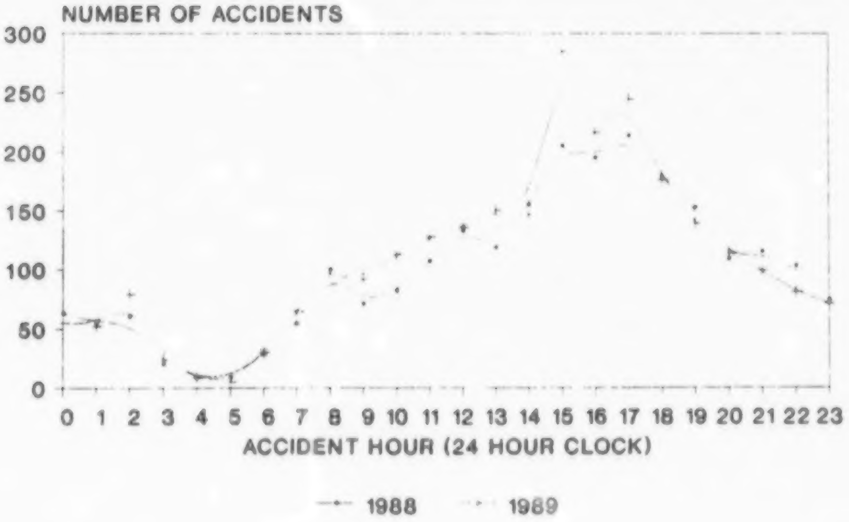


fig. 20

PEDESTRIANS INJURED BY ACCIDENT HOUR BY VICTIM AGE AND SEX IN 1989

ACCIDENT HOUR	UNKNOWN		1-5		6-10		11-15		16-20		21-25		26-30		31-40		41-50		51-60		61-70		OVER 70		TOTAL INJURED	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Mid.- 1 am	5	1	0	0	0	0	0	1	12	6	6	1	4	2	10	2	4	1	2	0	0	1	0	0	43	15
1 am- 2 am	2	2	0	0	0	0	0	1	7	9	13	3	5	0	6	0	4	1	0	0	0	0	0	0	37	16
2 am- 3 am	2	4	0	0	0	0	1	1	12	6	19	6	15	2	10	3	2	1	0	0	0	0	0	0	61	23
3 am- 4 am	0	2	0	0	0	0	0	1	4	2	3	3	4	0	1	0	3	0	0	0	0	0	0	0	15	8
4 am- 5 am	0	1	0	0	0	0	0	0	0	1	3	0	1	0	3	0	0	0	0	1	0	0	0	0	7	3
5 am- 6 am	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2
6 am- 7 am	1	0	0	0	0	0	0	0	0	5	4	1	0	0	4	2	2	0	2	1	3	2	0	0	16	11
7 am- 8 am	1	3	0	0	0	1	5	6	3	4	2	4	2	0	8	2	1	4	4	5	3	1	0	3	29	33
8 am- 9 am	1	2	3	0	13	8	9	7	3	11	2	3	2	4	6	5	1	2	0	2	4	0	2	5	46	49
9 am-10 am	3	1	0	0	4	3	0	2	3	4	5	3	1	3	6	6	7	5	4	6	6	6	2	8	41	47
10 am-11 am	6	6	2	1	7	0	0	2	3	5	5	2	3	5	7	7	5	2	2	2	9	9	12	10	61	51
11 am- Noon	2	2	7	5	5	1	3	3	4	4	1	4	6	1	10	6	7	4	8	7	6	3	14	10	73	50
Noon - 1 pm	9	5	4	2	7	5	6	6	6	7	3	6	6	5	5	13	3	7	5	7	1	8	6	9	61	80
1 pm- 2 pm	8	5	5	2	10	1	8	4	7	4	5	8	5	3	9	3	10	7	7	8	5	12	12	7	91	64
2 pm- 3 pm	11	6	7	2	5	9	7	14	5	5	3	4	5	5	10	4	3	8	5	7	1	6	9	5	71	76
3 pm- 4 pm	10	10	11	5	39	19	20	20	9	15	5	9	5	5	11	15	7	9	4	8	7	9	11	15	139	139
4 pm- 5 pm	3	5	8	3	20	14	9	15	11	16	11	6	9	9	12	6	12	3	7	7	3	11	4	12	109	107
5 pm- 6 pm	5	9	6	2	13	9	11	10	11	12	9	11	14	12	16	20	11	10	4	8	8	12	8	6	116	121
6 pm- 7 pm	6	8	11	2	11	2	12	7	3	13	3	16	10	10	16	8	7	8	4	3	1	12	3	1	87	90
7 pm- 8 pm	7	3	6	3	6	4	5	13	7	4	7	5	4	2	18	8	6	1	7	6	4	4	5	6	82	59
8 pm- 9 pm	4	2	2	2	2	2	8	8	8	6	7	2	6	4	9	8	9	6	8	3	2	1	3	0	68	44
9 pm-10 pm	4	0	0	0	0	0	5	7	9	6	7	5	2	4	11	7	6	0	5	4	2	4	6	1	57	38
10 pm-11 pm	4	1	1	0	0	0	2	0	8	9	7	3	8	3	12	4	6	3	5	0	2	2	0	0	55	25
11 pm- Mid.	1	0	0	0	0	0	1	3	10	6	6	2	3	1	11	5	3	2	5	1	2	0	1	0	43	20
UNKNOWN	4	4	2	2	2	2	3	3	8	8	4	4	2	2	4	4	3	3	0	0	2	2	9	9	43	43
TOTAL	99	82	75	31	144	80	115	134	153	170	141	111	122	83	215	138	122	87	88	86	71	105	107	107	1,452	1,214

PEDESTRIANS KILLED BY ACCIDENT HOUR BY VICTIM AGE AND SEX IN 1989

ACCIDENT HOUR	UNKNOWN		1-5		6-10		11-15		16-20		21-25		26-30		31-40		41-50		51-60		61-70		OVER 70		TOTAL KILLED	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Mid.- 1 am	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	5	0
1 am- 2 am	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	3	1
2 am- 3 am	0	0	0	0	0	0	0	0	1	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	4	1
3 am- 4 am	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4 am- 5 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 am- 6 am	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
6 am- 7 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1
7 am- 8 am	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1
8 am- 9 am	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
9 am-10 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	2
10 am-11 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
11 am- Noon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Noon - 1 pm	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
1 pm- 2 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 pm- 3 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
3 pm- 4 pm	0	0	1	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	3	2
4 pm- 5 pm	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	0	1	2	3
5 pm- 6 pm	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	1	4	2
6 pm- 7 pm	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	5	1
7 pm- 8 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1
8 pm- 9 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	2	1
9 pm-10 pm	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	3	2
10 pm-11 pm	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1
11 pm- Mid.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	3	1
UNKNOWN	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2
TOTAL	0	0	5	1	1	0	2	2	5	3	5	4	4	2	4	0	5	1	9	4	7	3	2	9	49	29

DISTRIBUTION OF PEDESTRIAN FATALITIES AND INJURIES BY AGE GROUP

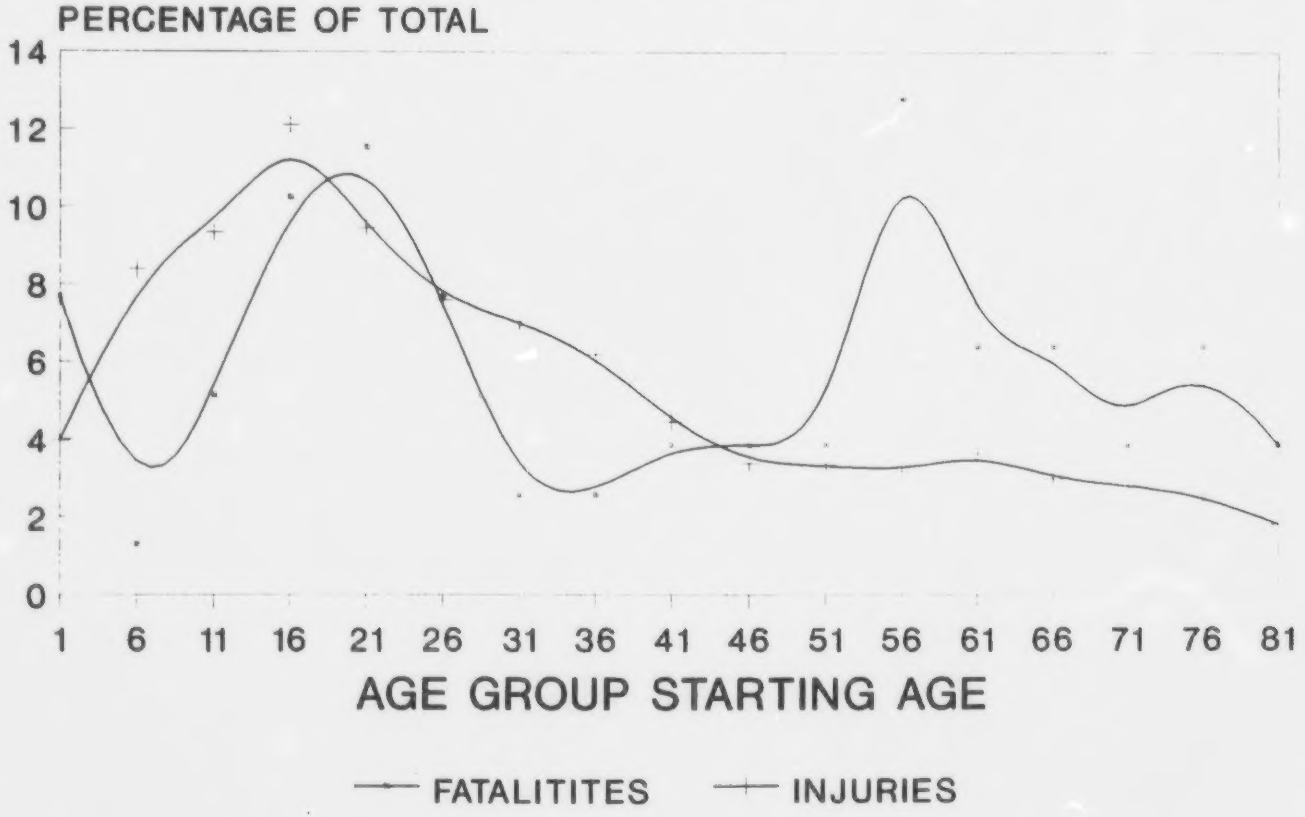


fig. 21

MAJOR CONTRIBUTING FACTORS IN 1989 PEDESTRIAN INVOLVED ACCIDENTS

- ALL FACTORS -

CONTRIBUTING FACTORS	ACCIDENT TYPE PROPERTY DAMAGE	PERSONAL INJURY	FATAL	TOTAL FACTORS	PERCENT OF TOTAL
FAILING TO YIELD RIGHT OF WAY	1	448	6	455	18.38
PEDESTRIAN ERROR/ CONFUSION	6	372	15	393	15.87
DRIVING WITHOUT DUE CARE	6	303	4	313	12.64
ALCOHOL INVOLVEMENT	3	245	16	264	10.66
BACKING UNSAFELY	1	87	1	89	3.59
WEATHER CONDITION	3	72	3	78	3.15
IGNORING TRAFFIC CONTROL DEVICE	0	49	2	51	2.06
VISIBILITY IMPAIRED	0	49	2	51	2.06
DRIVER INEXPERIENCE	2	45	0	47	1.90
DRIVING AT UNSAFE SPEED	0	38	6	44	1.78
SUNLIGHT GLARE	0	29	2	31	1.25
DRIVERLESS VEHICLE	0	26	0	26	1.05
AVOIDING VEH/PED/CYCLE	0	17	3	20	0.81
IMPROPER PASSING	0	10	0	10	0.40
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	0	7	2	9	0.36
SUICIDE ATTEMPT	0	6	3	9	0.36
DEFECTIVE BRAKES	1	7	0	8	0.32
IMPROPER TURNING	0	8	0	8	0.32
ARTIFICIAL GLARE	0	7	0	7	0.28
OTHER	4	433	8	445	17.98
UNKNOWN	2	113	3	118	4.77
TOTAL	29	2,371	76	2,476	100.00

NOTE: "OTHER" includes factors with less than 7 occurrences.

MAJOR CONTRIBUTING FACTORS IN 1989 PEDESTRIAN INVOLVED ACCIDENTS

- PEDESTRIAN FACTORS ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
PEDESTRIAN ERROR/ CONFUSION	5	329	15	349	42.30
ALCOHOL INVOLVEMENT	2	155	10	167	20.24
FAILING TO YIELD RIGHT OF WAY	0	39	1	40	4.85
IGNORING TRAFFIC CONTROL DEVICE	0	18	0	18	2.18
DRIVING WITHOUT DUE CARE	0	13	0	13	1.58
SUICIDE ATTEMPT	0	5	3	8	0.97
WEATHER CONDITION	0	6	0	6	0.73
PHYSICAL DISABILITY	0	3	1	4	0.48
VISIBILITY IMPAIRED	0	4	0	4	0.48
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	0	2	1	3	0.36
CUTTING IN	0	2	0	2	0.24
DRIVER INEXPERIENCE	0	2	0	2	0.24
ROAD MAINTENANCE/ CONSTRUCTION	0	2	0	2	0.24
DRIVING AT UNSAFE SPEED	0	2	0	2	0.24
BACKING UNSAFELY	0	1	0	1	0.12
DOMESTIC ANIMAL	0	0	1	1	0.12
DRUGS (ILLEGAL)	0	1	0	1	0.12
EXTREME FATIGUE	0	1	0	1	0.12
ILLNESS	0	1	0	1	0.12
ROAD/INTERSECTION DESIGN	0	1	0	1	0.12
ROADSIDE HAZARD	0	1	0	1	0.12
OTHER	1	173	1	175	21.21
UNKNOWN	1	22	0	23	2.79
TOTAL	9	783	33	825	100.00

MAJOR CONTRIBUTING FACTORS IN 1989 PEDESTRIAN INVOLVED ACCIDENTS

- DRIVER/VEHICLE FACTORS ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
FAILING TO YIELD RIGHT OF WAY	1	409	5	415	25.14
DRIVING WITHOUT DUE CARE	6	290	4	300	18.17
ALCOHOL INVOLVEMENT	1	90	6	97	5.88
BACKING UNSAFELY	1	86	1	88	5.33
WEATHER CONDITION	3	66	3	72	4.36
VISIBILITY IMPAIRED	0	45	2	47	2.85
DRIVER INEXPERIENCE	2	43	0	45	2.73
PEDESTRIAN ERROR/ CONFUSION	1	43	0	44	2.67
DRIVING AT UNSAFE SPEED	0	36	6	42	2.54
IGNORING TRAFFIC CONTROL DEVICE	0	31	2	33	2.00
SUNLIGHT GLARE	0	29	2	31	1.88
DRIVERLESS VEHICLE	0	26	0	26	1.57
AVOIDING VEH/PED/CYCLE	0	17	3	20	1.21
IMPROPER PASSING	0	10	0	10	0.61
DEFECTIVE BRAKES	1	7	0	8	0.48
IMPROPER TURNING	0	8	0	8	0.48
ARTIFICIAL GLARE	0	7	0	7	0.42
OTHER	3	254	6	263	15.93
UNKNOWN	1	91	3	95	5.75
TOTAL	20	1,588	43	1,651	100.00

NOTE: "OTHER" includes factors with less than 6 occurrences.

PEDESTRIANS INJURED BY AGE AND PEDESTRIAN ACTION IN 1989 ACCIDENTS

PEDESTRIAN ACTION	VICTIM AGE									
	1-5	6-10	11-15	16	17	18	19	20	21-25	26-30
CROSSING WITH SIGNAL	5	6	25	5	6	11	11	8	29	29
CROSSING AGAINST SIGNAL	5	10	9	4	2	1	3	4	7	11
CROSSING AT MARKED CROSSWALK, NO SIGNAL	7	28	41	10	4	6	6	8	18	25
CROSSING WITH NO SIGNAL, NO CROSS WALK	35	70	66	14	14	13	14	11	57	42
WALKING WITH TRAFFIC	0	5	10	6	4	4	3	5	15	7
WALKING AGAINST TRAFFIC	1	2	9	1	5	7	0	1	5	5
EMERGING FROM FRONT/BEHIND PARKED CAR	22	34	16	3	3	4	1	5	16	6
CHILD GETTING ON/OFF SCHOOL VEHICLE/CAR	2	3	4	0	1	0	0	0	0	0
ADULT GETTING ON/OFF VEHICLE	0	0	1	1	1	1	0	2	8	4
PUSHING/WORKING ON CAR	0	0	2	1	0	0	0	0	2	4
WORKING IN ROADWAY	0	0	2	0	1	1	0	1	8	6
PLAYING IN ROADWAY	17	21	7	2	3	4	2	0	3	1
RIDING/HITCHING ON CAR	2	4	4	0	2	1	2	2	7	3
STANDING ON SIDEWALK	0	0	0	0	0	0	0	0	0	0
OTHER	8	30	40	14	24	8	6	9	54	44
N/A	0	0	1	0	0	0	0	0	0	0
UNKNOWN	0	10	9	6	1	0	4	8	20	17
TOTAL	104	223	246	67	71	61	52	64	249	204

cont'd...

PEDESTRIANS INJURED BY AGE BY PEDESTRIAN ACTION IN 1989 ACCIDENTS

cont'd...

PEDESTRIAN ACTION	VICTIM AGE								TOTAL INJURED
	31-40	41-50	51-60	61-70	71-80	81-90	OVER 91	UNKNOWN	
CROSSING WITH SIGNAL	50	28	32	31	26	8	1	18	329
CROSSING AGAINST SIGNAL	15	10	9	4	5	2	0	5	106
CROSSING AT MARKED CROSSWALK, NO SIGNAL	45	31	23	37	23	16	1	26	355
CROSSING WITH NO SIGNAL, NO CROSS WALK	74	43	41	46	33	16	1	37	627
WALKING WITH TRAFFIC	11	5	3	6	4	0	0	4	92
WALKING AGAINST TRAFFIC	2	2	0	3	4	2	0	4	53
EMERGING FROM FRONT/BEHIND PARKED CAR	16	8	8	4	3	4	0	9	162
CHILD GETTING ON/OFF SCHOOL VEHICLE/CAR	0	0	0	0	0	0	0	1	11
ADULT GETTING ON/OFF VEHICLE	6	4	3	0	0	0	0	3	34
PUSHING/WORKING ON CAR	2	4	1	1	0	0	0	6	23
WORKING IN ROADWAY	16	5	2	0	0	0	0	3	45
PLAYING IN ROADWAY	3	2	0	0	0	0	0	4	69
RIDING/HITCHING ON CAR	6	7	10	7	2	3	0	10	72
STANDING ON SIDEWALK	0	0	0	0	0	0	0	0	0
OTHER	73	40	33	30	30	6	1	47	497
N/A	1	0	2	0	0	1	0	1	6
UNKNOWN	29	17	7	6	9	3	1	9	156
TOTAL	349	206	174	175	139	61	5	187	2,637

PEDESTRIANS KILLED BY AGE AND PEDESTRIAN ACTION IN 1989 ACCIDENTS

PEDESTRIAN ACTION	VICTIM AGE									
	1-5	6-10	11-15	16	17	18	19	20	21-25	26-30
CROSSING WITH SIGNAL	0	0	0	0	0	0	0	0	0	0
CROSSING AGAINST SIGNAL	1	0	0	0	0	0	0	0	0	0
CROSSING AT MARKED CROSSWALK, NO SIGNAL	0	0	0	1	0	0	0	0	1	0
CROSSING WITH NO SIGNAL, NO CROSS WALK	1	0	0	0	0	1	0	2	2	1
WALKING WITH TRAFFIC	0	0	2	0	0	0	1	0	0	1
WALKING AGAINST TRAFFIC	0	0	0	0	1	0	0	0	0	1
EMERGING FROM FRONT/BEHIND PARKED CAR	1	0	1	0	0	0	0	0	0	0
CHILD GETTING ON/OFF SCHOOL VEHICLE/CAR	0	0	0	0	0	0	0	0	0	0
ADULT GETTING ON/OFF VEHICLE	0	0	0	0	0	0	0	0	0	0
PUSHING/WORKING ON CAR	0	0	0	0	0	0	0	0	0	0
WORKING IN ROADWAY	0	0	0	0	0	0	0	0	0	0
PLAYING IN ROADWAY	2	1	0	0	0	0	0	0	0	0
RIDING/HITCHING ON CAR	0	0	0	0	0	0	0	0	0	0
STANDING ON SIDEWALK	0	0	0	0	0	0	0	0	0	0
OTHER	1	0	0	0	1	0	1	0	6	2
N/A	0	0	0	0	0	0	0	0	0	0
UNKNOWN	0	0	0	0	0	0	0	0	0	1
TOTAL	6	1	3	1	2	1	2	2	9	6

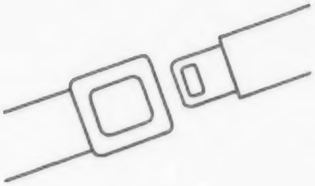
cont'd...

PEDESTRIANS KILLED BY AGE AND PEDESTRIAN ACTION IN 1989 ACCIDENTS

cont'd...

PEDESTRIAN ACTION	VICTIM AGE								
	31-40	41-50	51-60	61-70	71-80	81-90	91-95	UNKNOWN	TOTAL KILLED
CROSSING WITH SIGNAL	0	0	0	2	0	0	0	0	2
CROSSING AGAINST SIGNAL	0	0	0	0	0	0	0	0	1
CROSSING AT MARKED CROSSWALK, NO SIGNAL	0	1	1	1	2	0	0	0	7
CROSSING WITH NO SIGNAL, NO CROSS WALK	0	4	7	3	2	3	0	0	26
WALKING WITH TRAFFIC	0	0	1	0	1	0	0	1	7
WALKING AGAINST TRAFFIC	0	0	0	1	0	0	0	0	3
EMERGING FROM FRONT/BEHIND PARKED CAR	0	0	1	0	0	0	0	0	3
CHILD GETTING ON/OFF SCHOOL VEHICLE/CAR	0	0	0	0	0	0	0	0	0
ADULT GETTING ON/OFF VEHICLE	0	0	1	0	0	0	0	0	1
PUSHING/WORKING ON CAR	0	0	0	0	0	0	0	0	0
WORKING IN ROADWAY	1	0	0	0	0	0	0	0	1
PLAYING IN ROADWAY	0	0	0	0	0	0	0	0	3
RIDING/HITCHING ON CAR	0	0	1	0	0	0	0	0	1
STANDING ON SIDEWALK	0	0	0	0	0	0	0	0	0
OTHER	2	1	0	2	2	0	0	0	18
N/A	0	0	0	0	0	0	0	0	0
UNKNOWN	1	0	0	1	1	0	0	0	4
TOTAL	4	6	12	10	8	3	0	1	77

SECTION 6



SAFETY EQUIPMENT

1989 ACCIDENTS - SAFETY EQUIPMENT

The use of safety equipment by motor vehicle drivers has been mandatory since 1977. Since March 1985, approved child restraints have been compulsory for children under the age of six.

Based on incidence in accidents only, restraints or safety use account for 96% of all drivers whose safety behaviour was recorded. Since 42% of all accident reports had no record of restraint use, no conclusions can be drawn from this statistic.

Conclusions can be drawn from the incidence of accident type based on safety equipment used. The graph "Safety Equipment in Accident Type" shows that the use of safety devices was more prominent in the incidence of passengers and drivers not injured, while the non-use of safety devices was more prominent in injuries and fatalities. Note, however, that confidence in passenger results is limited due to the small sample size.

The case of lap and harness for drivers shows the effect of safety devices clearly. For those using this retraint in 1989, 83% were not injured, 17% were injured and .016% were killed. For those drivers who were not using restraints, although their vehicles were equiped, 61% were not injured, 37% were injured and 2.2% were killed. Therefore, the use of safety devices is clearly associated with lower incidence of injury and death.

As a proportion of total accidents, the share of accidents not involving injury has been declining over the past five years, while the share of accidents involving injury is increasing. This trend is more dramatic for accidents in which restraints are not used, since both injury and fatality percentages are rising.

TYPE OF SAFETY EQUIPMENT USED BY DRIVERS AND PASSENGERS IN 1989 ACCIDENTS

DRIVERS

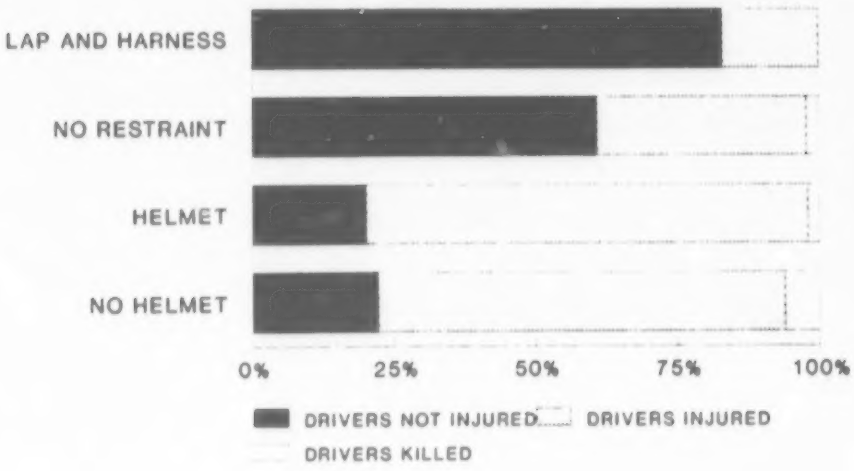
SAFETY EQUIPMENT	NOT INJURED	INJURED	KILLED	TOTAL DRIVERS	PERCENT OF TOTAL
LAP & HARNESS	93,695	19,764	90	113,549	49.37
LAP BELT ONLY	9,839	1,742	18	11,599	5.04
NONE USED	3,183	1,953	117	5,253	2.28
NONE IN VEHICLE	1,057	226	5	1,288	0.56
HARNESS ONLY	1,053	193	1	1,247	0.54
HELMET	217	861	23	1,101	0.48
NO HELMET	15	50	4	69	0.03
OTHER	0	0	0	0	0.00
UNKNOWN	93,724	2,151	33	95,908	41.70
TOTAL	202,783	26,940	291	230,014	100.00

PASSENGERS

SAFETY EQUIPMENT	NOT INJURED	INJURED	KILLED	TOTAL PASSENGERS	PERCENT OF TOTAL
LAP & HARNESS	32,007	8,338	54	40,399	52.41
LAP BELT ONLY	15,335	3,252	24	18,611	24.14
NONE USED	2,456	2,293	88	4,837	6.27
CHILD RESTRAINT	2,641	228	7	2,876	3.73
NONE IN VEHICLE	981	407	5	1,393	1.81
HARNESS ONLY	433	135	0	568	0.74
HELMET	36	134	3	173	0.22
NO HELMET	6	12	4	22	0.03
OTHER	0	0	0	0	0.00
UNKNOWN	7,049	1,136	24	8,209	10.65
TOTAL	60,944	15,935	209	77,088	100.00

SAFETY EQUIPMENT USED IN ACCIDENTS

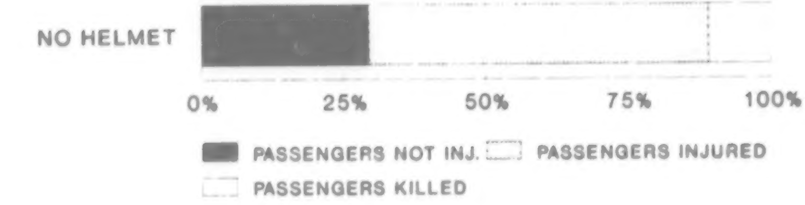
DRIVERS INVOLVED BY ACCIDENT TYPE



(% OF ALL ACCIDENTS IN RESTRAINT CLASS)

fig. 22

PASSENGERS INVOLVED BY ACCIDENT TYPE



(% OF ALL ACCIDENTS IN RESTRAINT CLASS)

fig. 23

SAFETY EQUIPMENT USED FOR VICTIMS INJURED IN 1989 ACCIDENTS
BY POSITION IN VEHICLE

	POSITION IN VEHICLE											
SAFETY EQUIPMENT	DRIVER	CENTER FRONT	RIGHT FRONT	LEFT BACK	CENTER BACK	RIGHT BACK	CARGO AREA	HANGING ON	OTHER	UNKNOWN	TOTAL VICTIMS	PERCENT OF TOTAL
LAP AND HARNESS	19,764	1,007	6,771	210	68	247	19	6	3	7	28,102	65.54
LAP BELT ONLY	1,742	309	645	892	274	1,072	45	7	2	6	4,994	11.65
NONE USED	1,953	316	1,105	252	167	239	140	50	10	14	4,246	9.90
HELMET	861	0	0	122	0	0	0	12	0	0	995	2.32
NONE IN VEHICLE	226	51	99	29	33	31	133	27	1	3	633	1.48
HARNESS ONLY	193	18	80	14	2	20	0	0	0	1	328	0.77
CHILD RESTRAINT	0	20	42	58	41	64	2	0	0	1	228	0.53
NO HELMET	50	0	1	7	0	0	0	2	0	2	62	0.14
OTHER	0	0	0	0	0	0	0	0	0	0	0	0.00
UNKNOWN	2,151	164	493	209	63	114	32	39	7	15	3,287	7.67
TOTAL	26,940	1,885	9,236	1,793	648	1,787	371	143	23	49	42,875	100.00

NOTE: For motorcycles, "RIGHT FRONT" refers to a sidecar, and "LEFT BACK" refers to the position directly behind the motorcycle driver.

SAFETY EQUIPMENT USED FOR VICTIMS KILLED IN 1989 ACCIDENTS
BY POSITION IN VEHICLE

	POSITION IN VEHICLE											
SAFETY EQUIPMENT	DRIVER	CENTER FRONT	RIGHT FRONT	LEFT BACK	CENTER BACK	RIGHT BACK	CARGO AREA	HANGING ON	OTHER	UNKNOWN	TOTAL VICTIMS	PERCENT OF TOTAL
NONE USED	117	7	45	9	3	7	6	2	2	7	205	41.00
LAP AND HARNESS	90	1	50	1	0	0	0	0	2	0	144	28.80
LAP BELT ONLY	18	0	9	7	3	5	0	0	0	0	42	8.40
HELMET	23	0	0	1	0	0	0	0	0	2	26	5.20
NONE IN VEHICLE	5	0	0	2	0	0	1	1	1	0	10	2.00
NO HELMET	4	0	0	3	0	0	0	0	0	1	8	1.60
CHILD RESTRAINT	0	1	1	1	0	4	0	0	0	0	7	1.40
HARNESS ONLY	1	0	0	0	0	0	0	0	0	0	1	0.20
OTHER	0	0	0	0	0	0	0	0	0	0	0	0.00
UNKNOWN	33	1	13	1	3	3	0	1	0	2	57	11.40
TOTAL	291	10	118	25	9	19	7	4	5	12	500	100.00

NOTE: For motorcycles, "RIGHT FRONT" refers to a sidecar, and "LEFT BACK" refers to the position directly behind the motorcycle driver.

DRIVER AGE BY SAFETY EQUIPMENT USED FOR DRIVERS INJURED IN 1989 ACCIDENTS

DRIVER AGE	SAFETY EQUIPMENT									TOTAL VICTIMS	PERCENT OF TOTAL
	VEHICLE NOT EQUIPPED	NONE USED	LAP BELT ONLY	HARNESS ONLY	LAP & HARNESS	HELMET	NO HELMET	OTHER	UNKNOWN		
1 - 10	0	1	0	0	10	2	0	0	6	19	0.07
11 - 15	3	13	2	0	24	11	3	0	13	69	0.26
16	9	57	43	6	422	14	3	0	32	586	2.18
17	11	91	55	8	594	28	5	0	72	864	3.21
18	21	119	93	7	756	49	6	0	80	1,131	4.20
19	9	149	91	6	771	43	1	0	113	1,183	4.39
20	13	109	67	13	791	57	2	0	109	1,161	4.31
21 - 25	35	439	353	24	3,241	231	9	0	424	4,756	17.65
26 - 30	37	291	286	26	2,950	145	8	0	356	4,099	15.22
31 - 35	19	208	186	24	2,422	102	6	0	272	3,239	12.02
36 - 40	21	144	155	20	2,065	71	5	0	211	2,692	9.99
41 - 45	10	98	104	12	1,523	42	1	0	123	1,913	7.10
46 - 50	9	61	75	10	1,086	32	0	0	90	1,363	5.06
51 - 55	8	55	67	14	846	15	0	0	64	1,069	3.97
56 - 60	7	24	46	10	716	10	1	0	35	849	3.15
61 - 65	4	21	36	6	538	2	0	0	46	653	2.42
66 - 70	3	25	30	4	437	3	0	0	35	537	1.99
71 - 75	3	18	23	3	271	1	0	0	16	335	1.24
76 - 80	1	16	11	0	171	1	0	0	10	210	0.78
81 - 85	2	3	13	0	76	0	0	0	4	98	0.36
86 - 90	0	0	3	0	18	0	0	0	2	23	0.09
91 - 95	0	0	0	0	2	0	0	0	0	2	0.01
OVER 95	0	0	0	0	0	0	0	0	1	1	0.00
UNKNOWN	1	11	3	0	34	2	0	0	37	88	0.33
TOTAL	226	1,953	1,742	193	19,764	861	50	0	2,151	26,940	100.00

DRIVER AGE BY SAFETY EQUIPMENT USED FOR DRIVERS KILLED IN 1989 ACCIDENTS

DRIVER AGE	SAFETY EQUIPMENT										
	VEHICLE NOT EQUIPPED	NONE USED	LAP BELT ONLY	HARNESS ONLY	LAP & HARNESS	HELMET	NO HELMET	OTHER	UNKNOWN	TOTAL VICTIMS	PERCENT OF TOTAL
1 - 10	0	0	0	0	0	0	0	0	0	0	0.00
11 - 15	0	0	0	0	0	0	2	0	0	2	0.69
16	0	1	1	0	0	0	0	0	0	2	0.69
17	0	5	1	0	0	0	0	0	1	7	2.41
18	0	6	0	0	4	1	0	0	1	12	4.12
19	0	3	0	0	7	1	0	0	2	13	4.47
20	0	4	0	1	1	3	0	0	1	10	3.44
21 - 25	2	30	3	0	6	5	2	0	4	52	17.87
26 - 30	1	23	3	0	9	5	0	0	5	46	15.81
31 - 35	1	10	2	0	16	2	0	0	3	34	11.68
36 - 40	0	10	3	0	7	3	0	0	4	27	9.28
41 - 45	0	8	2	0	9	1	0	0	2	22	7.56
46 - 50	0	8	0	0	2	2	0	0	1	13	4.47
51 - 55	0	3	0	0	5	0	0	0	4	12	4.12
56 - 60	0	0	0	0	4	0	0	0	2	6	2.06
61 - 65	0	0	1	0	6	0	0	0	1	8	2.75
66 - 70	0	2	1	0	6	0	0	0	1	10	3.44
71 - 75	1	0	1	0	5	0	0	0	0	7	2.41
76 - 80	0	2	0	0	3	0	0	0	0	5	1.72
81 - 85	0	2	0	0	0	0	0	0	1	3	1.03
86 - 90	0	0	0	0	0	0	0	0	0	0	0.00
91 - 95	0	0	0	0	0	0	0	0	0	0	0.00
TOTAL	5	117	18	1	90	23	4	0	33	291	100.00

PASSENGER AGE BY SAFETY EQUIPMENT USED FOR PASSENGERS INJURED IN 1989 ACCIDENTS

VICTIM AGE	SAFETY EQUIPMENT										TOTAL VICTIMS	PERCENT OF TOTAL
	VEHICLE NOT EQUIPPED	NONE USED	LAP BELT ONLY	HARNESS ONLY	LAP AND HARNESS	CHILD RESTRAINT	HELMET	NO HELMET	OTHER	UNKNOWN		
1	2	24	13	2	9	72	0	0	0	4	126	0.79
2	3	16	17	1	20	52	0	0	0	10	119	0.75
3	3	24	47	1	38	42	0	0	0	8	163	1.02
4	1	21	65	1	51	19	0	1	0	1	160	1.00
5	5	16	80	0	46	17	0	0	0	17	181	1.14
6 - 10	27	74	369	5	288	12	5	0	0	34	814	5.11
11 - 15	45	193	410	13	460	1	13	0	0	73	1,208	7.58
16	23	154	194	5	300	0	3	0	0	42	721	4.52
17	25	173	187	5	343	0	6	1	0	58	798	5.01
18	19	163	175	5	381	0	12	1	0	61	817	5.13
19	22	148	131	8	341	1	10	0	0	57	718	4.51
20	19	117	83	5	325	0	5	0	0	60	614	3.85
21 - 25	56	409	358	21	1,104	1	23	5	0	148	2,125	13.34
26 - 30	27	210	245	10	873	1	17	3	0	104	1,490	9.35
31 - 35	19	130	151	12	593	0	7	0	0	62	974	6.11
36 - 40	21	59	124	9	476	0	4	0	0	46	739	4.64
41 - 45	14	58	84	5	408	1	8	0	0	34	612	3.84
46 - 50	8	44	70	5	368	0	3	0	0	18	516	3.24
51 - 55	9	24	64	1	306	0	3	0	0	20	427	2.68
56 - 60	5	30	58	5	246	0	0	0	0	26	370	2.32
61 - 65	2	27	57	4	256	0	1	0	0	12	359	2.25
66 - 70	6	14	47	0	243	0	0	0	0	14	324	2.03
71 - 75	7	12	37	0	174	0	0	0	0	7	237	1.49
76 - 80	2	3	30	1	98	0	0	0	0	7	141	0.88
81 - 85	0	6	10	2	54	1	0	0	0	3	76	0.48
86 - 90	0	6	5	0	14	0	0	0	0	0	25	0.16
91 - 95	0	0	1	1	4	0	0	0	0	0	6	0.04
OVER 95	0	0	1	0	3	0	0	0	0	0	4	0.03
UNKNOWN	37	138	139	8	516	8	14	1	0	210	1,071	6.72
TOTAL	407	2,293	3,252	135	8,338	228	134	12	0	1,136	15,935	100.00

PASSENGER AGE BY SAFETY EQUIPMENT USED FOR PASSENGERS KILLED IN 1989 ACCIDENTS

VICTIM AGE	SAFETY EQUIPMENT											TOTAL VICTIMS	PERCENT OF TOTAL
	VEHICLE NOT EQUIPPED	NONE USED	LAP BELT ONLY	HARNESS ONLY	LAP AND HARNESS	AIR BAG	CHILD RESTRAINT	HELMET	NO HELMET	OTHER	UNKNOWN		
1	1	5	0	0	2	0	4	0	0	0	1	13	6.22
2	0	0	0	0	0	0	1	0	0	0	0	1	0.48
3	0	0	0	0	0	0	2	0	0	0	0	2	0.96
4	0	1	1	0	1	0	0	0	0	0	1	4	1.91
5	0	1	0	0	0	0	0	0	0	0	0	1	0.48
6 - 10	0	3	4	0	0	0	0	0	0	0	0	7	3.35
11- 15	0	7	0	0	0	0	0	0	0	0	0	7	3.35
16	0	2	3	0	0	0	0	0	0	0	1	6	2.87
17	1	4	4	0	1	0	0	0	1	0	2	13	6.22
18	0	7	2	0	0	0	0	0	0	0	2	11	5.26
19	0	7	1	0	3	0	0	0	0	0	1	12	5.74
20	0	6	0	0	2	0	0	0	0	0	1	9	4.31
21- 25	1	14	1	0	4	0	0	2	0	0	6	28	13.40
26- 30	0	16	0	0	6	0	0	0	1	0	0	23	11.00
31- 35	2	4	0	0	3	0	0	0	2	0	1	12	5.74
36- 40	0	3	1	0	6	0	0	0	0	0	4	14	6.70
41- 45	0	0	1	0	6	0	0	0	0	0	3	10	4.78
46- 50	0	1	0	0	3	0	0	0	0	0	0	4	1.91
51- 55	0	1	0	0	1	0	0	0	0	0	1	3	1.44
56- 60	0	0	1	0	2	0	0	0	0	0	0	4	1.91
61- 65	0	1	1	0	1	0	0	0	0	0	0	3	1.44
66- 70	0	0	2	0	2	0	0	0	0	0	0	4	1.91
71- 75	0	1	1	0	3	0	0	0	0	0	0	5	2.39
76- 80	0	3	1	0	3	0	0	0	0	0	0	7	3.35
81- 85	0	1	0	0	3	0	0	0	0	0	0	4	1.91
86- 90	0	0	0	0	0	0	0	0	0	0	0	2	0.96
91- 95	0	0	0	0	2	0	0	0	0	0	0	0	0.00
OVER 95	0	0	0	0	0	0	0	0	0	0	0	0	0.00
UNKNOWN	0	0	0	0	0	0	0	0	0	0	0	0	0.00
TOTAL	5	88	24	0	54	0	7	3	4	0	24	209	100.00

SECTION 7

ENVIRONMENTAL FACTORS

1989 ACCIDENTS - ENVIRONMENTAL FACTORS

Environmental factors were reported to be a major contributing factor in 16.64% of accidents in which contributing factors were attributed. This figure is unchanged from 1988.

The incidence of environmental factors generally matches the prominence of the environmental condition. However, some anomolies exist.

Although asphalt roads account for 70% of property damage accidents in which environmental conditions were a contributing factor, they account for 89% of injuries and 92% of fatalities. One reason for such a phenomenon may be the ability of drivers to travel at higher speeds on dry asphalt roads. Table 8.6 shows that a greater proportion of accidents occur on roads with higher posted speed limits.

Although absence of light (darkness with no artificial lighting) contributes to 7.34% of accidents with contributing environmental factors, it contributes to 25% of such accidents involving fatalities.

1989 ACCIDENTS BY ROAD TYPE

ROAD TYPE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
ASPHALT	77,992	29,662	450	108,104	74.63
GRAVEL	4,304	1,088	28	5,420	3.74
EARTH	574	118	6	698	0.48
CONCRETE	446	141	3	590	0.41
WOOD	95	39	2	136	0.09
OILED GRAVEL	75	25	0	100	0.07
BRICK/STONE	20	16	1	37	0.03
OTHER	44	12	1	57	0.04
UNKNOWN	27,754	1,961	0	29,715	20.51
TOTAL	111,304	33,062	491	144,857	100.00

1989 ACCIDENTS BY ROADWAY SURFACE CONDITION

SURFACE CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRY	64,242	19,890	302	84,434	58.29
WET	30,778	9,886	115	40,779	28.15
ICY	5,949	1,534	32	7,515	5.19
SNOW	4,614	921	25	5,560	3.84
SLUSH	1,136	361	11	1,508	1.04
MUDDY	255	53	1	309	0.21
OTHER	113	30	2	145	0.10
UNKNOWN	4,217	387	3	4,607	3.18
TOTAL	111,304	33,062	491	144,857	100.00

1989 ACCIDENTS
BY ROAD TYPE AND SURFACE CONDITIONS

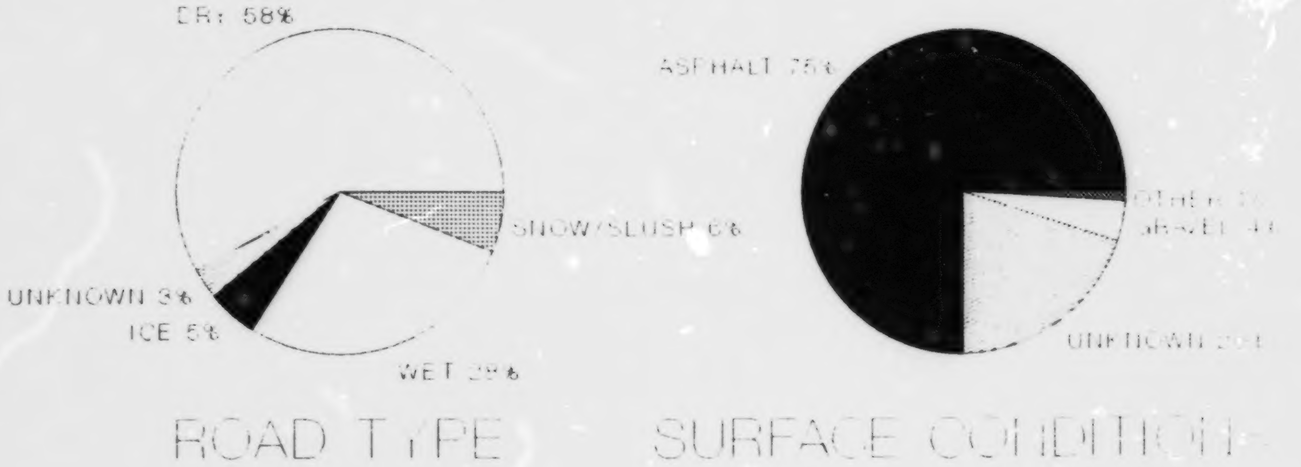


fig. 24

1989 ACCIDENTS BY LIGHTING CONDITION

LIGHTING CONDITION	ACCIDENT TYPE PROPERTY DAMAGE	ACCIDENT TYPE PERSONAL INJURY	ACCIDENT TYPE FATAL	TOTAL ACCIDENTS	PERCENT OF TOTAL
DAYLIGHT	69,906	21,391	237	91,534	63.19
DARK/SOME ILLUMINATION	14,424	4,244	75	18,743	12.94
DARK/FULL ILLUMINATION	9,429	2,586	26	12,041	8.31
DARK/NO ILLUMINATION	7,708	2,806	121	10,635	7.34
DUSK	3,766	1,232	19	5,017	3.46
DAWN	1,380	533	11	1,924	1.33
OTHER	178	1	0	179	0.12
UNKNOWN	4,513	269	2	4,784	3.30
TOTAL	111,304	33,062	491	144,857	100.00

1989 ACCIDENTS BY WEATHER CONDITION

WEATHER CONDITION	ACCIDENT TYPE PROPERTY DAMAGE	ACCIDENT TYPE PERSONAL INJURY	ACCIDENT TYPE FATAL	TOTAL ACCIDENTS	PERCENT OF TOTAL
CLEAR	54,670	15,741	255	70,666	48.78
CLOUDY	27,250	9,273	135	36,658	25.31
RAIN	18,583	6,017	60	24,660	17.02
SNOW/SLEET	4,775	1,183	32	5,990	4.14
FOG	957	361	6	1,324	0.91
STRONG WIND	108	33	0	141	0.10
HAIL	50	13	0	63	0.04
SMOG/SMOKE	34	10	0	44	0.03
OTHER	114	10	0	124	0.09
UNKNOWN	4,763	421	3	5,187	3.58
TOTAL	11,304	33,062	491	144,857	100.00

1989 ACCIDENTS BY LAND USAGE

LAND USAGE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BUSINESS/SHOPPING	31,858	9,473	59	41,390	28.57
URBAN RESIDENTIAL	19,514	8,290	79	27,883	19.25
AGRICULTURAL/UNDEVELOPED	11,600	5,303	214	17,117	11.82
RURAL RESIDENTIAL	5,730	2,671	77	8,478	5.85
INDUSTRIAL/MANUFACTURING	4,744	1,922	27	6,693	4.62
APARTMENT RESIDENTIAL	4,756	1,627	13	6,396	4.42
SCHOOL/PLAYGROUND	2,192	756	6	2,954	2.04
RECREATIONAL/PARK/CAMPING	2,070	670	14	2,754	1.90
OTHER	103	21	2	126	0.09
UNKNOWN	28,737	2,329	0	31,066	21.45
TOTAL	111,304	33,062	491	144,857	100.00

1989 ACCIDENTS BY LAND USAGE

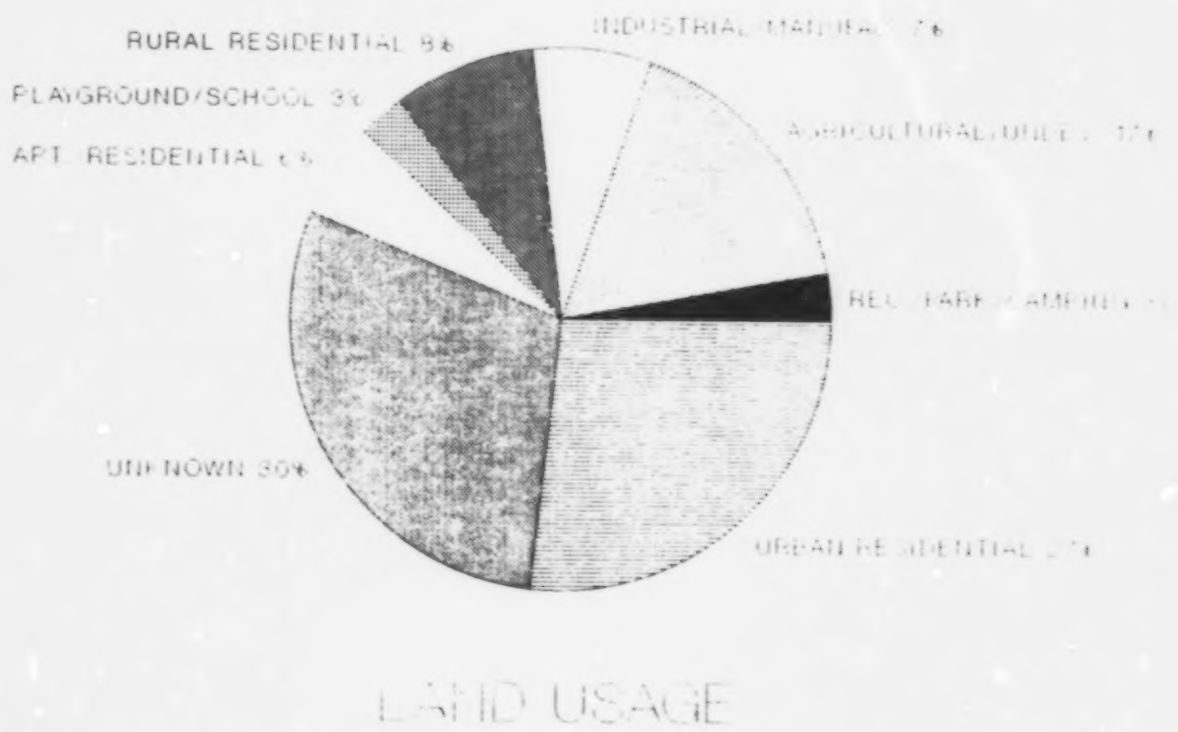
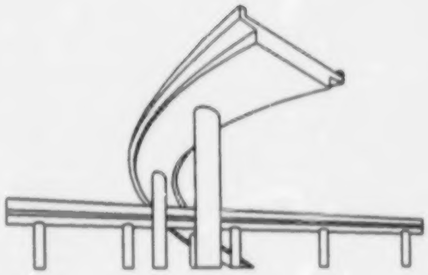


fig. 25

SECTION 8



ACCIDENT CONFIGURATIONS

1989 ACCIDENTS - ACCIDENT CONFIGURATIONS

The distribution of accidents among the various accident configurations changes little from year to year, so 1989 figures are largely unchanged from 1988.

Rear-end and right-angle collisions have the highest incidence of occurrence among multiple vehicle accidents, with 18.81 and 11.20% respectively of all accidents. Travelling off the road to the right is the most common configuration for single vehicle accidents, with 7.75% of total accidents.

With respect to accident locations, 32.68% occurred at intersections, while 39% occured between intersections. Over 78% of accidents occurred on municipal streets.

1989 ACCIDENTS BY PRIMARY ACCIDENT OCCURRENCE

PRIMARY ACCIDENT OCCURRENCE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
REAR END	18,348	8,881	17	27,246	18.81
RIGHT ANGLE COLLISION	10,708	5,451	61	16,220	11.20
OFF ROAD - RIGHT	7,261	3,873	88	11,222	7.75
OFF ROAD - LEFT	4,498	2,725	82	7,305	5.04
SIDE SWIPE	6,631	897	14	7,542	5.21
BACKING UP	7,409	313	2	7,724	5.33
LEFT TURN - ACROSS ONCOMING TRAFFIC	3,999	1,800	13	5,812	4.01
HEAD ON	2,409	1,164	97	3,670	2.53
OVERTAKING	2,815	463	5	3,283	2.27
LEFT TURN - HEAD ON	1,609	564	5	2,178	1.50
LEFT TURN - ONE WAY	789	147	0	936	0.65
RIGHT TURN - REAR END	798	161	1	960	0.66
RIGHT TURN - HEAD ON	455	124	0	579	0.40
ONE WAY STREET	284	52	1	337	0.23
RIGHT TURN - SAME DIRECTION	210	61	0	271	0.19
RIGHT TURN - OPPOSITE DIRECTION	95	21	0	116	0.08
UNKNOWN	11,499	1,791	28	13,318	9.19
OTHER	31,487	4,574	77	36,138	24.95
TOTAL	111,304	33,062	491	144,857	100.00

1989 MULTIPLE VEHICLE ACCIDENTS BY PRIMARY ACCIDENT OCCURRENCE

PRIMARY ACCIDENT OCCURRENCE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
REAR END	18,215	8,848	15	27,078	24.18
RIGHT ANGLE COLLISION	10,427	4,977	51	15,455	13.80
SIDE SWIPE	6,139	790	13	6,942	6.20
BACKING UP	6,959	189	1	7,149	6.38
LEFT TURN - ACROSS ONCOMING TRAFFIC	3,961	1,683	10	5,654	5.05
OVERTAKING	2,767	435	4	3,206	2.86
LEFT TURN - HEAD ON	1,564	513	5	2,082	1.86
HEAD ON	1,117	925	85	2,127	1.90
LEFT TURN - ONE WAY	768	134	0	902	0.81
RIGHT TURN - REAR END	772	146	0	918	0.82
OFF ROAD - RIGHT	624	173	1	798	0.71
OFF ROAD - LEFT	388	151	9	548	0.49
RIGHT TURN - HEAD ON	441	102	0	543	0.48
ONE WAY STREET	249	37	0	286	0.26
RIGHT TURN - SAME DIRECTION	171	41	0	212	0.19
RIGHT TURN - OPPOSITE DIRECTION	68	14	0	82	0.07
OTHER	24,892	2,265	25	27,182	24.27
UNKNOWN	9,693	1,113	12	10,818	9.66
TOTAL	89,215	22,536	231	111,982	100.00

1989 SINGLE VEHICLE ACCIDENTS BY PRIMARY ACCIDENT OCCURRENCE

PRIMARY ACCIDENT OCCURRENCE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
OFF ROAD - RIGHT	6,637	3,700	87	10,424	31.71
OFF ROAD - LEFT	4,110	2,574	73	6,757	20.55
HEAD ON	1,292	239	12	1,543	4.69
RIGHT ANGLE COLLISION	281	474	10	765	2.33
SIDE SWIPE	492	107	1	600	1.83
BACKING UP	450	124	1	575	1.75
REAR END	133	33	2	168	0.51
LEFT TURN - ACROSS ONCOMING TRAFFIC	38	117	3	158	0.48
LEFT TURN - HEAD ON	45	51	0	96	0.29
OVERTAKING	48	28	1	77	0.23
RIGHT TURN - SAME DIRECTION	39	20	0	59	0.18
ONE WAY STREET	35	15	1	51	0.16
RIGHT TURN - REAR END	26	15	1	42	0.13
LEFT TURN - ONE WAY	21	13	0	34	0.10
RIGHT TURN - OPPOSITE DIRECTION	27	7	0	34	0.10
RIGHT TURN - HEAD ON	14	22	0	36	0.11
OTHER	6,595	2,309	52	8,956	27.24
UNKNOWN	1,806	678	16	2,500	7.60
TOTAL	22,089	10,526	260	32,875	100.00

1989 ACCIDENTS BY ACCIDENT LOCATION

ACCIDENT LOCATION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BETWEEN INTERSECTIONS	43,044	13,133	313	56,490	39.00
AT INTERSECTION	32,520	14,720	105	47,345	32.68
PARKING LOT	18,909	612	0	16,521	13.48
ROAD/DRIVEWAY INTERSECTION	6,984	1,904	21	8,909	6.15
OFF HIGHWAY	2,030	627	14	2,671	1.84
BRIDGE	1,410	638	20	2,068	1.43
ENTRANCE RAMP	421	161	0	582	0.40
EXIT RAMP	345	128	0	473	0.33
INDUSTRIAL ROAD	376	120	9	505	0.35
ENTRANCE ACCELERATION LANE	231	100	0	331	0.23
ENTRANCE INTERSECTION	183	63	0	246	0.17
RAILROAD CROSSING	159	55	3	217	0.15
EXIT INTERSECTION	117	53	0	170	0.12
FERRY OR DOCK	117	28	0	145	0.10
TUNNEL	71	35	2	108	0.07
TRANSIT EXPRESS LANE	30	3	0	33	0.02
EXIT DECELERATION LANE	81	35	0	116	0.08
OTHER	546	115	3	664	0.46
UNKNOWN	3,730	532	1	4,263	2.94
TOTAL	111,304	33,062	491	144,857	100.00

1989 ACCIDENTS BY ROAD JURISDICTION

ROAD JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
MUNICIPAL STREET	90,170	22,967	213	113,350	78.25
PROVINCIAL HIGHWAY	16,787	8,522	244	25,553	17.64
RURAL ROAD	4,347	1,573	34	5,954	4.11
UNKNOWN	0	0	0	0	.00
TOTAL	111,304	33,062	491	144,857	100.00

1989 ACCIDENTS BY SPEED BY ROAD JURISDICTION

- MUNICIPAL STREET -

SPEED	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
POSTED 50 KM/H	34,256	14,044	118	48,418	42.72
POSTED 60 KM/H	3,757	2,117	37	5,911	5.25
ADVISORY 50 KM/H	2,217	1,219	5	3,441	3.04
POSTED 30 KM/H	2,426	577	4	3,007	2.65
POSTED 80 KM/H	1,282	559	26	1,867	1.65
POSTED 10 KM/H	1,083	49	0	1,132	1.00
POSTED 70 KM/H	446	272	4	722	0.64
ADVISORY 30 KM/H	590	101	3	694	0.61
POSTED 20 KM/H	590	86	1	677	0.59
POSTED 40 KM/H	441	104	3	548	0.48
ADVISORY 10 KM/H	513	32	0	545	0.48
POSTED 90 KM/H	344	113	3	460	0.41
ADVISORY 20 KM/H	362	46	1	409	0.36
SPECIAL 10 KM/H	157	9	0	166	0.15
SPECIAL 30 KM/H	130	21	0	151	0.13
ADVISORY 40 KM/H	86	22	0	108	0.09
SPECIAL 20 KM/H	84	8	1	93	0.08
ADVISORY 60 KM/H	59	32	1	92	0.08
SPECIAL 50 KM/H	74	18	0	92	0.08
POSTED 100 KM/H	70	15	2	87	0.07
ADVISORY 80 KM/H	50	15	0	65	0.05
SPECIAL 40 KM/H	22	1	0	23	0.02
POSTED 110 KM/H	14	2	0	12	0.01
ADVISORY 70 KM/H	8	4	0	12	0.01
SPECIAL 80 KM/H	7	4	0	11	0.00
SPECIAL 60 KM/H	6	4	0	10	0.00
OTHER	446	29	2	477	0.42
UNKNOWN	40,650	3,464	2	44,116	38.92
TOTAL	90,170	22,967	213	113,350	100.00

1989 ACCIDENTS BY SPEED BY ROAD JURISDICTION

- PROVINCIAL HIGHWAY -

SPEED	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
POSTED 90 KM/H	4,150	1,806	106	6,062	23.72
POSTED 80 KM/H	3,550	1,930	53	5,533	21.65
POSTED 50 KM/H	3,482	1,920	13	5,415	21.19
POSTED 60 KM/H	1,992	1,192	19	3,203	12.53
POSTED 70 KM/H	647	388	17	1,052	4.12
POSTED 100 KM/H	306	208	7	521	2.04
POSTED 110 KM/H	224	103	8	335	1.31
ADVISORY 50 KM/H	196	106	4	306	1.20
ADVISORY 60 KM/H	151	107	8	266	1.05
POSTED 10 KM/H	174	79	2	255	1.00
POSTED 30 KM/H	138	38	1	177	0.69
ADVISORY 30 KM/H	81	34	1	116	0.45
ADVISORY 40 KM/H	51	32	2	85	0.33
ADVISORY 70 KM/H	34	30	1	65	0.25
POSTED 40 KM/H	43	9	0	52	0.20
ADVISORY 80 KM/H	37	10	0	47	0.18
SPECIAL 50 KM/H	28	17	0	45	0.17
ADVISORY 20 KM/H	18	13	0	31	0.12
POSTED 20 KM/H	19	9	0	28	0.11
SPECIAL 60 KM/H	11	8	0	19	0.07
SPECIAL 10 KM/H	15	2	0	17	0.06
ADVISORY 10 KM/H	13	3	0	16	0.06
SPECIAL 80 KM/H	8	6	0	14	0.05
SPECIAL 30 KM/H	10	3	0	13	0.05
ADVISORY 90 KM/H	7	4	0	11	0.04
SPECIAL 20 KM/H	2	4	0	6	0.02
SPECIAL 40 KM/H	2	0	0	2	0.00
OTHER	20	10	0	30	0.12
UNKNOWN	1,378	451	2	1,831	7.17
TOTAL	16,787	8,522	244	25,553	100.00

1989 ACCIDENTS BY SPEED BY ROAD JURISDICTION

- RURAL ROAD -

SPEED	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
POSTED 50 KM/H	1,101	437	2	1,540	25.86
POSTED 80 KM/H	707	268	12	987	16.58
POSTED 60 KM/H	542	316	4	862	14.48
POSTED 30 KM/H	118	22	1	141	2.37
ADVISORY 80 KM/H	101	34	2	137	2.30
ADVISORY 50 KM/H	90	40	3	133	2.23
POSTED 90 KM/H	95	36	0	131	2.20
POSTED 70 KM/H	64	24	0	88	1.48
ADVISORY 30 KM/H	52	25	0	77	1.30
ADVISORY 60 KM/H	43	22	0	65	1.09
POSTED 40 KM/H	37	14	0	51	0.85
ADVISORY 20 KM/H	26	7	0	33	0.55
POSTED 10 KM/H	26	2	0	28	0.47
ADVISORY 10 KM/H	22	3	0	25	0.42
POSTED 20 KM/H	18	6	0	24	0.40
SPECIAL 80 KM/H	15	8	1	24	0.40
SPECIAL 50 KM/H	20	2	0	22	0.37
ADVISORY 40 KM/H	9	10	0	19	0.32
ADVISORY 70 KM/H	6	5	0	11	0.18
SPECIAL 20 KM/H	7	3	1	11	0.18
SPECIAL 10 KM/H	8	0	0	8	0.14
SPECIAL 30 KM/H	7	1	0	8	0.14
POSTED 100 KM/H	3	1	0	4	0.07
SPECIAL 50 KM/H	3	1	0	4	0.07
ADVISORY 90 KM/H	2	0	0	2	0.04
OTHER	42	7	2	51	0.85
UNKNOWN	1,183	279	6	1,468	24.66
TOTAL	4,347	1,573	34	5,954	100.00

SECTION 9

LICENCED DRIVERS

1989 ACCIDENTS - LICENCED DRIVERS

Drivers licenced in British Columbia totalled 2,556,539 at the end of 1989. Newly licenced drivers accounted for 100,747 or 4% of this total.

Table 9.1 examines two items:

1. The proportion of a specific age group's involvement in accidents.
2. The proportion of drivers within a specific age group who are involved in accidents.

It is apparent that certain age groups are over-represented in traffic accidents.

Seveteen year-old drivers, for example, made up only 1.3% of all licenced drivers but accounted for 14% of the total drivers involved in accidents in 1989.

As well, there was an unusually high incidence of seventeen year-old drivers involved in accidents - almost 20% of the total age group population.

Older age categories tend to be more evenly represented in both the driver population as a whole and the population of drivers involved in accidents.

COMPARISON OF LICENCED DRIVERS AND DRIVERS INVOLVED IN 1989 ACCIDENTS BY AGE

COMPARISON	DRIVER AGE										
	UNK	UNDER 16	16	17	18	19	20	21-25	26-30	31-35	36-40
LICENCED DRIVERS	0	2,219	24,358	32,513	31,227	42,451	43,704	245,332	326,926	334,934	304,524
PERCENT OF TOTAL DRIVER POPULATION	0.0	0.09	0.95	1.27	1.22	1.66	1.71	9.60	12.79	13.10	11.91
DRIVERS INVOLVED IN ACCIDENTS	35,269	326	4,270	6,094	7,170	7,824	7,203	31,029	28,219	23,692	19,927
PERCENT OF TOTAL DRIVERS INVOLVED IN ACCIDENTS	15.23	0.14	1.84	2.63	3.10	3.38	3.11	13.40	12.19	10.23	8.61
PERCENT OF AGE GROUP DRIVER POPULATION INVOLVED IN ACCIDENTS	N/A	14.69	17.53	18.74	22.96	18.43	16.48	12.65	8.63	7.07	6.54

cont'd...

COMPARISON OF LICENCED DRIVERS AND DRIVERS INVOLVED IN 1989 ACCIDENTS BY AGE

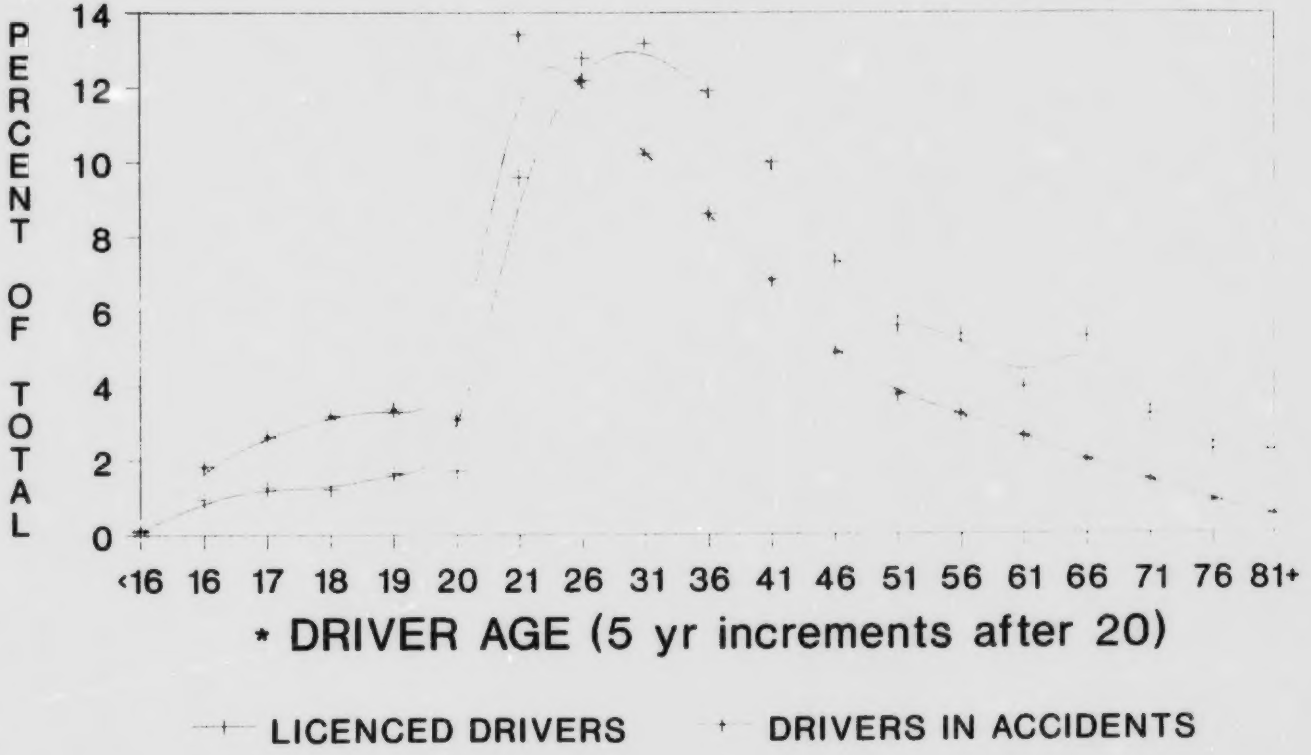
... cont'd.

COMPARISON	DRIVER AGE									TOTAL
	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	81+	
LICENCED DRIVERS	256,762	187,619	148,278	137,113	100,607	135,983	81,751	57,350	56,888	2,550,539
PERCENT OF TOTAL DRIVER POPULATION	10.00	7.33	5.60	5.36	3.94	5.32	3.20	2.24	2.23	100 %
DRIVERS INVOLVED IN ACCIDENTS	15,858	11,304	8,715	7,457	6,097	4,618	3,353	2,014	1,150	231,589
PERCENT OF TOTAL DRIVERS INVOLVED IN ACCIDENTS	6.85	4.88	3.76	3.22	2.63	1.99	1.45	0.87	0.50	100 %
PERCENT OF AGE GROUP DRIVER POPULATION INVOLVED IN ACCIDENTS	6.18	6.02	5.88	5.44	5.44	6.06	3.40	3.51	2.02	9.06

DRIVER AGE BY SEX BY ACCIDENT TYPE IN 1989 ACCIDENTS

	ACCIDENT TYPE															
	PROPERTY DAMAGE ACCIDENTS				PERSONAL INJURY ACCIDENTS				FATAL ACCIDENTS				TOTAL DRIVERS			
AGE	MALE	FEMALE	UNK.	TOTAL	MALE	FEMALE	UNK.	TOTAL	MALE	FEMALE	UNK.	TOTAL	MALE	FEMALE	UNK.	TOTAL
1 - 5	7	2	0	9	2	1	0	3	0	0	0	0	9	3	0	12
6 -10	6	3	0	9	4	0	0	4	0	0	0	0	10	3	0	13
11-15	138	52	0	190	84	25	0	109	2	0	0	2	224	77	0	301
16	2,137	920	7	3,064	767	424	1	1,192	12	2	0	14	2,916	1,346	8	4,270
17	3,064	1,264	8	4,336	1,189	556	2	1,747	9	2	0	11	4,262	1,822	10	6,094
18	3,658	1,375	12	5,045	1,467	630	2	2,099	23	3	0	26	5,148	2,008	14	7,170
19	4,052	1,544	5	5,601	1,572	620	3	2,195	21	7	0	28	5,645	2,171	8	7,824
20	3,671	1,386	7	5,064	1,510	602	1	2,113	21	5	0	26	5,202	1,993	8	7,203
21-25	15,084	6,154	20	21,978	6,234	2,687	8	8,929	103	19	0	122	22,141	8,860	28	31,029
26-30	14,504	5,720	12	20,236	5,394	2,484	6	7,884	81	18	0	99	19,979	8,222	18	28,219
31-35	11,964	5,244	19	17,227	4,214	2,152	3	6,369	80	16	0	96	16,258	7,412	22	23,692
36-40	9,721	4,799	12	14,532	3,388	1,916	5	5,309	69	17	0	86	13,178	6,732	17	19,927
41-45	7,978	3,698	7	11,683	2,637	1,464	8	4,109	53	13	0	66	10,668	5,175	15	15,858
46-50	5,801	2,555	4	8,360	1,910	990	2	2,902	31	11	0	42	7,742	3,556	6	11,304
51-55	4,732	1,738	5	6,475	1,514	696	2	2,212	24	4	0	28	6,270	2,438	7	8,715
56-60	4,062	1,419	7	5,488	1,372	570	2	1,944	20	5	0	25	5,454	1,994	9	7,457
61-65	3,338	1,183	2	4,523	1,083	470	2	1,555	16	3	0	19	4,437	1,656	4	6,097
66-70	2,331	1,041	2	3,374	820	402	0	1,222	19	3	0	22	3,170	1,446	2	4,618
71-75	1,716	794	1	2,511	575	252	1	828	9	5	0	14	2,300	1,051	2	3,353
76-80	1,043	446	1	1,490	346	168	0	514	5	5	0	10	1,394	619	1	2,014
81-85	521	149	1	671	169	41	0	210	6	0	0	6	696	190	1	887
86-90	124	42	0	166	43	6	1	50	0	1	0	1	167	49	1	217
91-95	17	1	0	18	5	0	0	5	0	0	0	0	22	1	0	23
OVER 95	5	2	0	7	1	0	0	1	0	0	0	0	6	2	0	8
UNKNOWN	4,867	1,682	25,850	32,399	698	269	1,888	2,855	0	0	15	15	5,565	1,951	27,753	35,269
TOTAL	105,261	43,213	25,982	174,456	36,998	17,425	1,937	56,360	604	139	15	758	142,863	60,777	27,934	231,574

DRIVERS: LICENCED VS ACCIDENT INVOLVED IN 1989 BY AGE



* Ages are in five year increments beginning at 21.

fig. 26

DRIVER AGE BY ACCIDENT HOUR IN 1989 ACCIDENTS

ACCIDENT HOUR	DRIVER AGE								
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40
Mid. - 1 am	17	117	145	173	177	163	588	437	508
1 am - 2 am	17	72	144	192	216	197	692	469	505
2 am - 3 am	7	56	90	167	282	251	895	520	470
3 am - 4 am	6	32	80	101	149	133	425	269	258
4 am - 5 am	12	21	47	56	87	76	257	161	182
5 am - 6 am	3	13	32	36	53	64	217	181	213
6 am - 7 am	4	14	45	69	98	83	440	487	775
7 am - 8 am	4	60	95	156	194	200	987	1,060	1,655
8 am - 9 am	10	142	269	282	294	281	1,460	1,414	2,471
9 am - 10 am	5	83	132	204	219	229	1,049	1,023	1,846
10 am- 11 am	8	94	138	186	241	209	1,122	1,215	2,049
11 am- Noon	12	169	247	304	310	304	1,394	1,421	2,398
Noon - 1 pm	16	271	339	392	425	363	1,649	1,736	2,640
1 pm - 2 pm	16	202	299	359	383	377	1,730	1,575	2,677
2 pm - 3 pm	22	241	356	441	470	414	1,885	1,724	2,965
3 pm - 4 pm	23	435	568	606	576	477	2,201	2,152	3,615
4 pm - 5 pm	19	358	476	650	610	574	2,510	2,458	3,910
5 pm - 6 pm	30	286	461	555	581	566	2,625	2,410	3,689
6 pm - 7 pm	15	231	335	386	446	423	1,893	1,676	2,518
7 pm - 8 pm	13	277	348	370	384	349	1,461	1,274	1,986
8 pm - 9 pm	7	273	328	329	349	326	1,212	1,058	1,443
9 pm - 10 pm	19	283	357	353	370	345	1,166	922	1,288
10 pm- 11 pm	15	231	296	283	335	275	1,057	817	1,094
11 pm - Mid.	21	195	256	282	298	246	919	704	895
UNKNOWN	5	114	211	238	277	278	1,195	1,056	1,569
TOTAL	326	4,270	6,094	7,170	7,824	7,203	31,029	28,219	43,619

cont'd...

DRIVER AGE BY ACCIDENT HOUR IN 1989 ACCIDENTS

cont'd...

ACCIDENT HOUR	DRIVER AGE						TOTAL DRIVERS	PERCENT OF TOTAL
	41-50	51-60	61-70	71-80	81+	UNKNOWN		
Mid.- 1 am	257	102	36	15	3	502	3,240	1.40
1 am- 2 am	224	80	33	18	1	596	3,456	1.49
2 am- 3 am	178	62	22	5	0	639	3,644	1.57
3 am- 4 am	113	36	13	3	1	314	1,933	0.83
4 am- 5 am	86	45	15	5	1	189	1,240	0.54
5 am- 6 am	126	82	21	4	1	164	1,210	0.52
6 am- 7 am	435	287	86	15	4	344	3,186	1.38
7 am- 8 am	1,044	649	241	35	12	836	7,227	3.12
8 am- 9 am	1,624	761	395	145	32	1,276	10,856	4.69
9 am- 10 am	1,228	800	528	191	49	1,130	8.816	3.18
10 am- 11 am	1,313	896	773	463	103	1,330	10,140	4.38
11 am- Noon	1,558	1,018	924	509	102	1,519	12,187	5.26
Noon- 1 pm	1,797	1,171	897	469	116	1,655	13,933	6.02
1 pm- 2 pm	1,734	1,201	901	534	122	1,816	13,923	6.01
2 pm- 3 pm	1,945	1,252	1,063	578	136	1,857	15,347	6.63
3 pm- 4 pm	2,333	1,462	1,088	581	142	2,150	18,409	7.95
4 pm- 5 pm	2,521	1,528	988	508	94	2,327	19,529	8.43
5 pm- 6 pm	2,321	1,337	753	315	77	2,163	18,169	7.85
6 pm- 7 pm	1,551	826	465	221	47	1,648	12,679	5.48
7 pm- 8 pm	1,180	686	378	183	27	1,317	10,233	4.42
8 pm- 9 pm	868	473	244	121	8	1,203	8.242	3.56
9 pm- 10 pm	720	386	221	87	12	1,092	7,621	3.29
10 pm- 11 pm	607	285	176	73	16	948	6,508	2.81
11 pm- Mid.	448	213	99	36	7	935	5,554	2.40
UNKNOWN	951	534	355	153	37	7,319	14,292	6.17
TOTAL	27,162	16,172	10,715	5,267	1,150	35,269	231,574	100.00

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- SUNDAY -

ACCIDENT HOUR	DRIVER AGE								
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40
Mid. - 1 am	1	33	42	40	46	27	133	94	111
1 am - 2 am	3	22	38	62	62	62	204	123	117
2 am - 3 am	1	19	30	57	83	76	272	155	134
3 am - 4 am	4	9	25	26	52	39	113	82	62
4 am - 5 am	3	5	20	24	28	24	71	34	33
5 am - 6 am	0	1	9	15	9	20	47	33	34
6 am - 7 am	1	1	11	8	10	11	39	38	53
7 am - 8 am	1	5	6	10	10	11	37	32	54
8 am - 9 am	0	7	13	9	15	11	47	53	83
9 am - 10 am	2	13	18	12	14	16	86	66	107
10 am- 11 am	0	13	15	17	32	13	91	125	191
11 am- Noon	1	32	31	33	24	31	145	153	235
Noon - 1 pm	2	31	39	36	35	28	184	229	168
1 pm - 2 pm	1	32	48	43	53	54	264	212	311
2 pm - 3 pm	6	42	49	44	75	60	275	239	384
3 pm - 4 pm	8	41	48	64	65	56	223	243	311
4 pm - 5 pm	5	40	48	69	47	53	249	244	249
5 pm - 6 pm	7	41	47	68	51	65	248	249	339
6 pm - 7 pm	5	21	41	46	59	45	203	154	159
7 pm - 8 pm	2	31	29	46	42	47	168	138	139
8 pm - 9 pm	2	34	38	43	49	42	133	129	149
9 pm - 10 pm	5	18	35	35	37	31	133	102	163
10 pm- 11 pm	0	16	25	22	42	30	112	100	119
11 pm - Mid.	2	21	23	24	32	24	75	77	105
UNKNOWN	0	24	23	36	46	35	167	129	173
TOTAL	62	552	751	889	1,018	911	3,719	3,233	4,383

cont'd...

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- SUNDAY -

cont'd...

ACCIDENT HOUR	DRIVER AGE						TOTAL DRIVERS	PERCENT OF TOTAL
	41-50	51-60	61-70	71-80	81+	UNKNOWN		
Mid.- 1 am	47	20	3	2	0	109	708	3.74
1 am- 2 am	57	12	13	6	0	140	921	4.09
2 am- 3 am	46	19	9	2	0	166	1,069	4.55
3 am- 4 am	31	10	2	0	1	94	550	2.39
4 am- 5 am	13	4	2	1	1	51	314	1.28
5 am- 6 am	15	8	4	1	0	39	235	0.99
6 am- 7 am	26	17	6	0	1	30	252	1.08
7 am- 8 am	36	23	8	0	0	39	272	1.20
8 am- 9 am	48	28	18	7	1	63	401	1.85
9 am- 10 am	79	56	47	31	5	93	645	2.78
10 am- 11 am	110	89	61	57	8	147	959	3.89
11 am- Noon	152	91	87	41	6	165	1,227	4.49
Noon- 1 pm	185	120	86	68	10	172	1,493	6.30
1 pm- 2 pm	150	136	107	52	15	242	1,820	6.45
2 pm- 3 pm	158	142	110	65	16	266	2,031	6.64
3 pm- 4 pm	190	130	95	51	9	222	1,756	6.59
4 pm- 5 pm	220	136	82	58	7	192	1,799	7.08
5 pm- 6 pm	213	128	92	29	10	236	1,824	6.74
6 pm- 7 pm	151	95	50	34	4	182	1,349	5.02
7 pm- 8 pm	111	74	35	22	5	146	1,135	4.46
8 pm- 9 pm	96	71	26	19	2	131	964	4.02
9 pm- 10 pm	72	45	23	14	4	121	841	3.16
10 pm- 11 pm	72	28	26	10	3	119	724	2.65
11 pm- Mid.	43	29	8	3	1	81	548	2.38
UNKNOWN	90	55	33	18	4	942	1,775	6.18
TOTAL	2,611	1,567	1,033	581	114	4,188	25,612	100.00

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- MONDAY -

ACCIDENT HOUR	DRIVER AGE								
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40
Mid. - 1 am	1	9	9	14	14	20	60	42	50
1 am - 2 am	2	7	13	6	17	19	41	33	31
2 am - 3 am	0	1	3	8	11	8	33	17	19
3 am - 4 am	0	0	4	6	6	11	24	15	19
4 am - 5 am	0	2	2	2	3	7	19	13	18
5 am - 6 am	0	0	3	3	2	6	19	21	21
6 am - 7 am	0	1	6	7	6	8	67	67	114
7 am - 8 am	1	9	8	24	26	32	140	178	148
8 am - 9 am	1	15	32	38	41	36	214	203	362
9 am - 10 am	2	18	14	37	39	25	138	150	248
10 am- 11 am	1	9	21	21	33	27	157	164	170
11 am- Noon	0	20	33	43	34	31	175	175	317
Noon - 1 pm	5	45	48	63	73	47	208	200	382
1 pm - 2 pm	0	26	43	43	47	52	204	175	361
2 pm - 3 pm	1	40	44	69	58	49	242	243	390
3 pm - 4 pm	1	65	89	74	82	63	325	283	497
4 pm - 5 pm	1	50	72	91	100	92	368	370	602
5 pm - 6 pm	2	31	61	65	74	70	350	315	507
6 pm - 7 pm	4	17	37	53	63	54	252	233	321
7 pm - 8 pm	3	32	47	47	60	48	179	169	134
8 pm - 9 pm	0	23	43	43	45	42	126	120	167
9 pm - 10 pm	1	21	44	43	54	45	155	118	145
10 pm- 11 pm	2	21	24	31	50	34	119	90	135
11 pm - Mid.	1	8	16	32	18	24	97	76	104
UNKNOWN	1	13	24	25	32	44	151	145	198
TOTAL	30	483	740	888	988	894	3,863	3,615	5,760

cont'd...

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- MONDAY -

cont'd...

ACCIDENT HOUR	DRIVER AGE 41-50	51-60	61-70	71-80	81+	UNKNOWN	TOTAL DRIVERS	PERCENT OF TOTAL
Mid.- 1 am	26	6	2	1	0	43	297	1.08
1 am- 2 am	19	8	0	4	0	41	241	0.64
2 am- 3 am	14	4	3	0	0	28	149	0.43
3 am- 4 am	5	2	1	1	0	12	106	0.29
4 am- 5 am	8	4	1	0	0	16	95	0.30
5 am- 6 am	11	5	2	1	0	17	111	0.44
6 am- 7 am	55	43	9	2	0	31	416	1.58
7 am- 8 am	173	108	40	9	2	126	1,124	4.08
8 am- 9 am	149	110	57	21	6	202	1,587	5.69
9 am- 10 am	159	127	88	34	6	150	1,235	4.53
10 am- 11 am	177	124	112	69	18	164	1,367	4.12
11 am- Noon	195	128	130	67	12	173	1,533	5.31
Noon- 1 pm	145	153	140	60	15	207	1,891	6.21
1 pm- 2 pm	224	157	115	61	12	214	1,734	6.04
2 pm- 3 pm	250	174	162	90	11	245	2,068	6.94
3 pm- 4 pm	357	205	163	75	22	292	2,593	9.18
4 pm- 5 pm	276	118	126	73	14	313	2,866	9.60
5 pm- 6 pm	305	214	88	30	15	271	2,398	8.41
6 pm- 7 pm	193	113	54	23	5	211	1,633	5.81
7 pm- 8 pm	162	82	55	32	4	146	1,300	3.60
8 pm- 9 pm	96	61	30	18	1	170	985	3.07
9 pm- 10 pm	83	61	28	14	2	135	949	3.06
10 pm- 11 pm	88	31	17	4	3	118	767	2.35
11 pm- Mid.	46	32	8	8	1	100	571	1.91
UNKNOWN	123	80	63	19	7	947	1,872	5.33
TOTAL	3,639	2,150	1,494	716	156	4,372	29,888	100.00

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- TUESDAY -

ACCIDENT HOUR	DRIVER AGE								
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40
Mid. - 1 am	2	9	9	11	20	11	44	45	53
1 am - 2 am	2	4	7	14	12	21	50	38	48
2 am - 3 am	2	1	3	12	19	13	60	32	40
3 am - 4 am	0	3	2	9	9	14	32	25	23
4 am - 5 am	1	3	2	6	6	3	25	15	27
5 am - 6 am	0	2	4	1	3	4	22	23	35
6 am - 7 am	1	4	3	17	21	13	76	85	157
7 am - 8 am	0	16	10	30	35	33	179	203	292
8 am - 9 am	4	27	47	42	44	56	244	253	448
9 am - 10 am	0	8	16	32	36	26	157	148	299
10 am- 11 am	1	12	15	24	26	27	137	183	270
11 am- Noon	0	20	28	44	49	40	167	187	315
Noon - 1 pm	3	29	46	64	54	47	246	240	328
1 pm - 2 pm	1	20	27	36	43	39	182	225	310
2 pm - 3 pm	1	26	40	48	53	50	228	221	374
3 pm - 4 pm	1	61	71	95	87	54	319	282	503
4 pm - 5 pm	2	46	69	86	78	94	378	362	579
5 pm - 6 pm	5	39	66	56	87	79	384	375	546
6 pm - 7 pm	1	27	51	38	43	53	249	246	367
7 pm - 8 pm	0	28	35	49	40	42	212	169	279
8 pm - 9 pm	0	32	35	28	46	37	145	139	200
9 pm - 10 pm	1	26	42	42	30	44	126	97	161
10 pm- 11 pm	2	20	31	36	32	33	126	85	127
11 pm - Mid.	2	15	19	30	29	25	97	84	100
UNKNOWN	0	15	18	21	35	28	139	132	212
TOTAL	32	493	696	871	937	886	4,024	3,894	6,093

cont'd...

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- TUESDAY -

cont'd...

ACCIDENT HOUR	DRIVER AGE						TOTAL DRIVERS	PERCENT OF TOTAL
	41-50	51-60	61-70	71-80	81+	UNKNOWN		
Mid.- 1 am	26	12	7	3	0	51	303	1.00
1 am- 2 am	19	5	3	2	0	52	277	0.84
2 am- 3 am	13	11	1	1	0	46	254	0.88
3 am- 4 am	10	4	3	2	0	21	157	0.50
4 am- 5 am	11	4	1	0	0	12	116	0.28
5 am- 6 am	18	21	2	0	0	13	148	0.35
6 am- 7 am	84	50	15	1	0	57	584	1.29
7 am- 8 am	200	113	49	5	2	141	1,308	3.91
8 am- 9 am	284	144	70	28	1	230	1,922	5.82
9 am- 10 am	201	128	67	55	3	164	1,340	4.73
10 am- 11 am	173	137	90	62	13	178	1,348	5.77
11 am- Noon	189	145	132	74	8	179	1,577	6.37
Noon- 1 pm	252	167	135	74	21	210	1,916	6.62
1 pm- 2 pm	216	181	139	86	14	261	1,780	6.05
2 pm- 3 pm	145	151	135	87	20	239	1,918	6.76
3 pm- 4 pm	336	196	157	99	21	317	2,599	8.51
4 pm- 5 pm	377	147	154	73	18	346	2,909	8.78
5 pm- 6 pm	319	187	120	44	9	316	2,632	7.72
6 pm- 7 pm	207	102	76	31	2	237	1,730	5.18
7 pm- 8 pm	147	109	56	18	2	196	1,382	3.66
8 pm- 9 pm	113	46	39	17	0	171	1,048	3.10
9 pm- 10 pm	69	39	37	8	1	139	862	2.58
10 pm- 11 pm	67	41	25	10	3	103	741	2.21
11 pm- Mid.	53	23	16	4	1	93	591	1.94
UNKNOWN	118	72	49	23	6	977	1,845	5.15
TOTAL	3,647	2,335	1,578	807	145	4,749	31,287	100.00

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- WEDNESDAY -

ACCIDENT HOUR	DRIVER AGE								
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40
Mid. - 1 am	3	3	8	12	17	17	52	40	41
1 am - 2 am	2	4	7	12	23	17	59	40	59
2 am - 3 am	0	2	10	9	19	18	67	39	35
3 am - 4 am	0	3	3	5	7	7	27	19	14
4 am - 5 am	2	4	3	3	8	5	21	15	17
5 am - 6 am	1	1	3	2	4	2	19	18	31
6 am - 7 am	0	1	8	10	15	10	72	94	139
7 am - 8 am	0	5	21	29	47	38	222	243	328
8 am - 9 am	2	26	68	64	59	53	312	299	541
9 am - 10 am	0	8	23	29	39	51	174	192	323
10 am- 11 am	1	10	18	31	28	31	180	181	331
11 am- Noon	4	17	34	34	59	43	217	223	382
Noon - 1 pm	1	39	46	53	66	52	215	235	356
1 pm - 2 pm	5	25	33	54	55	52	238	218	382
2 pm - 3 pm	2	23	50	46	55	49	223	220	377
3 pm - 4 pm	2	61	91	89	79	64	297	308	601
4 pm - 5 pm	5	52	65	108	91	83	338	357	598
5 pm - 6 pm	4	50	59	79	84	83	347	323	525
6 pm - 7 pm	1	37	49	60	63	40	237	222	374
7 pm - 8 pm	2	28	51	35	52	45	177	169	258
8 pm - 9 pm	2	35	42	38	40	36	165	124	178
9 pm - 10 pm	0	42	47	39	38	38	141	109	163
10 pm- 11 pm	3	24	37	31	22	26	124	96	127
11 pm - Mid.	1	10	25	20	29	20	115	76	103
UNKNOWN	1	15	33	37	32	36	174	168	233
TOTAL	44	525	834	929	1,031	916	4,210	4,028	6,516

cont'd...

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- WEDNESDAY -

cont'd...

ACCIDENT HOUR	DRIVER AGE 41-50	51-60	61-70	71-80	81+	UNKNOWN	TOTAL DRIVERS	PERCENT OF TOTAL
Mid.- 1 am	25	14	6	2	0	51	291	1.16
1 am- 2 am	16	10	3	0	0	66	318	1.02
2 am- 3 am	10	4	1	0	0	49	263	0.99
3 am- 4 am	7	3	3	0	0	18	116	0.48
4 am- 5 am	16	11	5	1	0	14	125	0.26
5 am- 6 am	20	15	5	0	0	17	138	0.41
6 am- 7 am	92	65	20	2	2	65	595	1.42
7 am- 8 am	225	141	45	5	2	180	1,531	3.74
8 am- 9 am	342	152	84	35	5	240	2,282	5.97
9 am- 10 am	221	135	69	48	17	173	1,502	4.32
10 am- 11 am	205	130	132	74	19	188	1,559	4.38
11 am- Noon	227	172	129	79	23	234	1,877	5.74
Noon- 1 pm	269	156	136	75	19	238	1,956	6.22
1 pm- 2 pm	228	156	128	73	12	216	1,872	5.96
2 pm- 3 pm	268	152	137	76	19	224	1,921	6.88
3 pm- 4 pm	354	233	176	99	12	327	2,793	8.46
4 pm- 5 pm	349	208	155	82	10	353	2,854	9.20
5 pm- 6 pm	336	183	104	51	8	286	2,522	7.69
6 pm- 7 pm	215	120	52	34	8	232	1,744	5.47
7 pm- 8 pm	159	86	53	37	5	143	1,300	4.32
8 pm- 9 pm	117	52	29	13	2	159	1,032	3.30
9 pm- 10 pm	98	63	27	15	1	144	965	2.87
10 pm- 11 pm	71	39	20	15	2	104	741	2.34
11 pm- Mid.	53	25	12	3	0	94	586	1.94
UNKNOWN	161	90	61	25	6	1,026	2,098	5.46
TOTAL	4,084	2,415	1,592	844	172	4,841	32,981	100.00

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- THURSDAY -

ACCIDENT HOUR	DRIVER AGE								
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40
Mid. - 1 am	1	5	14	18	10	26	72	43	64
1 am - 2 am	2	3	6	17	17	18	54	45	49
2 am - 3 am	0	2	3	9	30	26	89	50	60
3 am - 4 am	0	2	5	6	8	10	37	29	34
4 am - 5 am	2	0	2	1	11	7	19	21	18
5 am - 6 am	0	1	2	3	13	5	32	22	33
6 am - 7 am	1	0	6	9	14	10	67	70	138
7 am - 8 am	1	9	21	29	34	29	157	184	334
8 am - 9 am	0	22	56	51	57	51	260	244	465
9 am - 10 am	0	5	17	34	30	33	188	164	312
10 am- 11 am	1	18	17	37	40	37	198	183	326
11 am- Noon	3	25	36	55	40	43	230	259	366
Noon - 1 pm	2	35	52	65	60	63	235	254	421
1 pm - 2 pm	1	21	38	51	49	56	267	211	401
2 pm - 3 pm	5	30	43	63	68	52	281	229	479
3 pm - 4 pm	6	66	102	94	85	78	330	327	568
4 pm - 5 pm	2	55	64	88	98	76	374	363	600
5 pm - 6 pm	2	42	72	89	96	73	417	350	628
6 pm - 7 pm	2	41	42	47	69	68	267	264	372
7 pm - 8 pm	1	48	47	58	59	53	214	174	317
8 pm - 9 pm	0	37	44	43	41	45	169	171	205
9 pm - 10 pm	4	46	43	54	65	38	171	150	207
10 pm- 11 pm	2	32	30	40	45	43	139	99	170
11 pm - Mid.	1	20	26	39	46	39	135	90	107
UNKNOWN	0	16	30	28	33	47	142	139	236
TOTAL	39	581	818	1,028	1,118	1,026	4,544	4,135	6,910

cont'd...

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- THURSDAY -

cont'd...

ACCIDENT HOUR	DRIVER AGE						TOTAL DRIVERS	PERCENT OF TOTAL
	41-50	51-60	61-70	71-80	81+	UNKNOWN		
Mid.- 1 am	34	7	2	1	1	42	340	1.30
1 am- 2 am	20	7	3	0	0	54	295	1.04
2 am- 3 am	20	4	0	0	0	67	360	1.06
3 am- 4 am	17	3	0	0	0	34	185	0.52
4 am- 5 am	12	7	2	0	0	14	116	0.36
5 am- 6 am	22	12	4	1	0	21	171	0.43
6 am- 7 am	79	40	13	4	1	57	509	1.36
7 am- 8 am	183	108	43	5	1	134	1,272	3.31
8 am- 9 am	278	134	64	16	6	214	1,918	4.96
9 am- 10 am	205	125	104	42	5	177	1,441	3.80
10 am- 11 am	224	140	133	72	14	201	1,641	4.42
11 am- Noon	234	158	160	78	24	233	1,944	5.31
Noon- 1 pm	249	200	127	79	20	251	2,113	5.96
1 pm- 2 pm	240	179	144	91	16	222	1,987	5.88
2 pm- 3 pm	265	189	184	86	27	277	2,278	6.57
3 pm- 4 pm	373	245	176	86	25	352	2,913	8.64
4 pm- 5 pm	416	238	158	79	16	360	2,987	8.67
5 pm- 6 pm	413	223	132	57	14	369	2,977	8.17
6 pm- 7 pm	233	112	69	35	7	230	1,858	5.57
7 pm- 8 pm	185	111	102	27	4	229	1,589	5.09
8 pm- 9 pm	131	71	34	19	0	145	1,155	3.38
9 pm- 10 pm	119	48	36	14	2	147	1,144	3.59
10 pm- 11 pm	105	45	23	12	2	128	915	3.15
11 pm- Mid.	59	30	14	4	0	128	738	2.39
UNKNOWN	138	67	46	23	6	1,005	1,956	5.07
TOTAL	4,254	2,503	1,733	831	191	5,091	34,802	100.00

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- FRIDAY -

ACCIDENT HOUR	DRIVER AGE								
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40
Mid. - 1 am	4	16	16	18	17	18	75	51	61
1 am - 2 am	3	7	14	15	24	22	91	57	72
2 am - 3 am	0	6	7	21	29	33	105	60	56
3 am - 4 am	0	3	10	8	18	9	61	28	39
4 am - 5 am	2	1	6	4	5	12	34	16	32
5 am - 6 am	0	2	2	1	5	8	27	27	27
6 am - 7 am	0	1	6	9	18	15	66	76	115
7 am - 8 am	1	6	20	20	28	36	190	182	306
8 am - 9 am	1	31	41	47	60	41	261	263	418
9 am - 10 am	1	13	21	32	43	42	198	192	359
10 am- 11 am	3	16	24	30	48	35	187	191	320
11 am- Noon	1	28	42	47	54	61	227	200	389
Noon - 1 pm	1	51	59	63	78	63	285	279	469
1 pm - 2 pm	3	28	50	70	77	64	287	263	452
2 pm - 3 pm	2	40	61	85	77	72	332	313	478
3 pm - 4 pm	2	94	101	123	107	85	403	446	674
4 pm - 5 pm	2	70	100	133	131	116	511	494	744
5 pm - 6 pm	5	48	80	119	111	128	566	488	732
6 pm - 7 pm	2	41	68	83	76	82	412	335	485
7 pm - 8 pm	0	69	84	79	78	77	307	289	405
8 pm - 9 pm	1	59	68	68	76	69	272	224	346
9 pm - 10 pm	2	79	81	82	84	85	274	218	265
10 pm- 11 pm	1	72	84	75	90	69	265	222	237
11 pm - Mid.	4	61	81	74	84	60	218	177	209
UNKNOWN	1	17	38	45	49	43	227	194	356
TOTAL	42	859	1,164	1,351	1,467	1,345	5,881	5,285	7,976

cont'd...

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- FRIDAY -

cont'd...

ACCIDENT HOUR	DRIVER AGE						TOTAL DRIVERS	PERCENT OF TOTAL
	41-50	51-60	61-70	71-80	81+	UNKNOWN		
Mid.- 1 am	38	16	5	3	0	79	417	1.27
1 am- 2 am	38	11	5	2	0	93	454	1.23
2 am- 3 am	28	5	3	1	0	81	435	1.30
3 am- 4 am	13	5	3	0	0	30	227	0.68
4 am- 5 am	11	5	3	1	0	22	154	0.41
5 am- 6 am	24	12	2	0	1	28	166	0.40
6 am- 7 am	60	50	16	3	0	59	494	1.17
7 am- 8 am	177	116	44	9	4	164	1,303	2.70
8 am- 9 am	311	135	72	23	6	224	1,934	4.43
9 am- 10 am	211	138	83	49	8	225	1,615	3.13
10 am- 11 am	234	138	128	81	13	228	1,676	4.08
11 am- Noon	283	165	148	88	22	265	2,020	5.03
Noon- 1 pm	318	198	151	62	15	315	2,407	5.75
1 pm- 2 pm	300	216	143	90	26	308	2,377	6.00
2 pm- 3 pm	340	267	180	90	26	285	2,648	6.32
3 pm- 4 pm	444	285	214	110	39	363	3,490	7.79
4 pm- 5 pm	511	342	203	95	17	459	3,928	9.27
5 pm- 6 pm	482	259	124	60	11	410	3,623	7.75
6 pm- 7 pm	347	170	94	32	13	310	2,550	5.88
7 pm- 8 pm	271	134	75	30	5	254	2,157	4.82
8 pm- 9 pm	188	88	53	22	0	271	1,807	4.26
9 pm- 10 pm	175	81	35	12	0	239	1,712	4.33
10 pm- 11 pm	125	57	34	11	1	212	1,555	3.58
11 pm- Mid.	112	42	17	8	3	244	1,394	3.21
UNKNOWN	194	101	58	29	6	1,218	2,506	5.21
TOTAL	5,235	3,036	1,893	911	218	6,386	43,049	100.00

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- SATURDAY -

ACCIDENT HOUR	DRIVER AGE								
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40
Mid. - 1 am	5	42	47	60	53	44	152	122	128
1 am - 2 am	3	25	59	66	61	38	193	133	129
2 am - 3 am	4	25	34	51	91	77	269	167	126
3 am - 4 am	2	12	31	41	49	43	131	71	67
4 am - 5 am	2	6	12	16	26	18	68	47	37
5 am - 6 am	2	6	9	11	17	19	51	37	32
6 am - 7 am	1	6	5	9	14	16	53	57	59
7 am - 8 am	0	10	9	14	14	21	62	38	93
8 am - 9 am	2	14	12	31	18	33	122	99	154
9 am - 10 am	0	18	23	28	18	36	108	111	198
10 am- 11 am	1	16	28	26	34	39	172	188	341
11 am- Noon	2	27	43	48	50	55	233	224	394
Noon - 1 pm	2	41	49	48	59	63	276	299	416
1 pm - 2 pm	4	50	60	62	59	60	291	271	460
2 pm - 3 pm	5	40	69	86	84	82	304	259	483
3 pm - 4 pm	3	47	66	67	71	77	304	263	461
4 pm - 5 pm	2	45	58	75	65	60	292	268	438
5 pm - 6 pm	5	35	76	79	78	68	313	310	412
6 pm - 7 pm	0	47	47	59	73	81	273	222	340
7 pm - 8 pm	5	41	55	56	53	37	204	166	254
8 pm - 9 pm	2	53	58	66	52	55	202	151	198
9 pm - 10 pm	6	51	65	58	62	64	166	128	184
10 pm- 11 pm	5	46	65	48	54	40	172	125	101
11 pm - Mid.	10	60	66	63	60	54	182	124	167
UNKNOWN	2	14	45	46	50	45	195	149	231
TOTAL	77	777	1,091	1,214	1,265	1,225	4,788	4,029	5,981

cont'd...

DRIVER AGE BY DAY OF THE WEEK AND ACCIDENT HOUR IN 1989 ACCIDENTS

- SATURDAY -

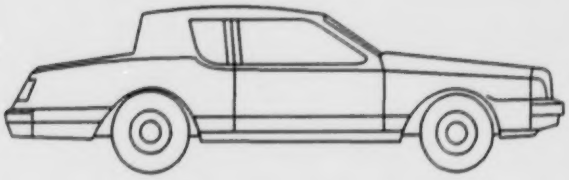
cont'd...

ACCIDENT HOUR	DRIVER AGE						TOTAL DRIVERS	PERCENT OF TOTAL
	41-50	51-60	61-70	71-80	81+	UNKNOWN		
Mid.- 1 am	61	27	11	3	2	127	884	3.32
1 am- 2 am	55	27	6	4	1	150	950	3.40
2 am- 3 am	47	15	5	1	0	202	1,114	3.62
3 am- 4 am	30	9	1	0	0	105	592	1.94
4 am- 5 am	15	10	1	2	0	60	320	0.96
5 am- 6 am	16	9	2	1	0	29	241	0.74
6 am- 7 am	39	22	7	3	0	45	336	0.88
7 am- 8 am	50	30	12	2	0	52	417	1.37
8 am- 9 am	111	60	30	15	7	103	812	2.08
9 am- 10 am	152	91	70	32	5	148	1,038	3.04
10 am- 11 am	190	138	117	58	18	224	1,590	4.60
11 am- Noon	278	159	138	79	5	270	2,009	5.60
Noon- 1 pm	279	177	122	51	13	262	2,157	6.20
1 pm- 2 pm	276	176	125	81	24	353	2,353	6.25
2 pm- 3 pm	319	177	155	84	15	321	2,483	6.99
3 pm- 4 pm	279	168	107	61	14	277	2,265	7.07
4 pm- 5 pm	272	139	110	48	9	304	2,186	6.51
5 pm- 6 pm	253	143	93	44	9	275	2,193	6.40
6 pm- 7 pm	205	114	70	32	6	246	1,591	4.97
7 pm- 8 pm	145	90	42	17	2	203	1,370	4.35
8 pm- 9 pm	127	84	33	12	1	156	1,251	3.60
9 pm- 10 pm	104	46	35	10	2	167	1,148	3.48
10 pm- 11 pm	79	44	31	11	2	164	1,065	3.00
11 pm- Mid.	82	32	24	6	1	195	1,126	3.53
UNKNOWN	127	69	45	16	2	1,204	2,240	6.10
TOTAL	3,592	2,066	1,392	677	139	5,642	33,955	100.00

DRIVERS INVOLVED IN 1989 ACCIDENTS BY ROAD USER CLASS AND AGE

DRIVER AGE	VEHICLE DRIVERS	CYCLE DRIVERS	OTHER DRIVERS	TOTAL DRIVERS
1 - 5	12	31	0	43
6 - 10	13	242	0	255
11 - 15	301	448	1	750
16	4,270	97	0	4,367
17	6,094	68	0	6,162
18	7,170	73	0	7,243
19	7,824	94	1	7,919
20	7,203	79	0	7,282
21 - 25	31,029	308	2	31,339
26 - 30	28,219	219	4	28,442
31 - 35	23,692	135	4	23,2831
36 - 40	19,927	90	6	20,023
41 - 45	15,858	49	4	15,911
46 - 50	11,304	16	4	11,324
51 - 55	8,715	16	4	8,735
56 - 60	7,457	13	9	7,479
61 - 65	6,097	16	0	6,113
66 - 70	4,618	5	1	4,624
71 - 75	3,353	4	0	3,357
76 - 80	2,014	5	1	2,020
81 - 85	887	1	0	888
86 - 95	240	0	0	240
OVER 95	8	0	0	8
UNKNOWN	35,269	213	54	35,536
TOTAL	231,574	2,222	95	233,891

SECTION 10



VEHICLES

1989 ACCIDENTS - VEHICLES

Although total vehicles licenced throughout the year increased by only 3%, the number of vehicles involved in accidents increased by 10% over 1988, to a total of 267,316.

Increases were noted for passenger cars involved (8.3%) and for light trucks by almost 16%.

Unlike 1988, the incidence of accidents involving dangerous goods carriers decreased, from 25 incidents in 1988 to 19 in 1989.

Sixty-four percent of vehicles involved in accidents were being operated for personal use, 12.5% for business or commercial purposes, and 8.5% were taxis.

NUMBER OF VEHICLES INVOLVED IN ACCIDENTS DURING 1989 BY MONTH

MONTH	ACCIDENT TYPE			TOTAL VEHICLES
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL	
JANUARY	19,480	4,444	65	23,989
FEBRUARY	16,107	3,920	54	20,081
MARCH	17,238	4,773	41	22,052
APRIL	14,259	4,391	45	18,695
MAY	15,981	4,815	49	20,845
JUNE	16,530	5,195	71	21,796
JULY	15,814	5,249	79	21,142
AUGUST	16,148	5,438	68	21,654
SEPTEMBER	15,912	5,100	70	21,082
OCTOBER	19,087	5,560	79	24,726
NOVEMBER	20,150	5,631	71	25,852
DECEMBER	19,992	5,320	90	25,402
TOTAL	206,698	59,836	782	267,316

NOTE: This report includes vehicles, bicycles and miscellaneous unclassified entities.

NUMBER OF VEHICLES INVOLVED IN ACCIDENTS DURING 1989 BY VEHICLE TYPE

VEHICLE TYPE	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
PASSENGER CAR	139,871	42,824	447	183,142	68.51
SINGLE UNIT TRUCK, LIGHT	37,510	10,325	182	48,017	17.96
*SINGLE UNIT TRUCK, HEAVY	2,963	625	19	3,607	1.35
MOTORCYCLE	630	1,509	31	2,170	0.81
BICYCLE	319	1,915	10	2,244	0.84
*TRACTOR TRAILER	1,670	428	32	2,130	0.80
TRUCK AND CAMPER	1,171	464	1	1,636	0.61
MOTOR HOME	762	175	3	940	0.35
*HEAVY TRUCK/TRAILER	747	131	6	884	0.33
LIGHT TRUCK/TRAILER	632	90	1	723	0.27
CAR & TRAILER	475	108	2	585	0.22
LOCAL TRANSIT BUS	431	129	4	564	0.21
*TRACTOR TRAILER & PUP	393	145	13	551	0.21
TRUCK CAMPER & TRAILER	417	120	3	540	0.20
*LOGGING TRUCK & POLE TRAILER	344	112	8	464	0.17
TOW TRUCK	282	83	1	366	0.14
SCHOOL BUS	167	45	0	212	0.08
INTERCITY BUS	121	33	2	156	0.06
GENERAL CONSTRUCTION	118	25	3	146	0.05
TRAILER ONLY	117	20	0	137	0.05
MOTOR HOME & TRAILER	58	9	0	67	0.03
ROAD CONSTRUCTION	52	13	1	66	0.02
MOPED	3	28	0	31	0.01
FARM VEHICLE	16	9	1	26	0.01
ATV-SNOW MOBILE	7	12	2	21	0.01
ATV-ALL-TERRAIN CYCLE	2	12	1	15	0.01
ATV-TRAIL BIKE	0	9	3	12	0.00
MOBILE CRANE	11	1	0	12	0.00
ATV-FOUR WHEEL DRIVE	2	2	1	5	0.00
ATV-DUNE BUGGY	2	2	0	4	0.00
MOBILE HOME	2	0	0	2	0.00
OTHER	125	42	3	170	0.06
UNKNOWN	17,278	391	2	17,671	6.61
TOTAL	206,698	59,836	782	267,316	100.00

* These vehicles are defined as weighing 10,900 kg or over.

NUMBER OF VEHICLES INVOLVED IN ACCIDENTS DURING 1989 BY VEHICLE USE

VEHICLE USE	ACCIDENT TYPE			TOTAL VEHICLES	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
PERSONAL	121,316	49,222	609	171,147	64.02
NOT IN USE	31,883	1,531	11	33,425	12.50
BUSINESS/COMMERCIAL	17,342	5,436	129	22,907	8.57
TAXI	1,045	418	4	1,467	0.55
RECREATIONAL	388	356	13	757	0.28
STOLEN	582	76	3	661	0.25
GOVERNMENT	374	101	1	476	0.18
EMERGENCY	332	127	0	459	0.17
FARM USE	113	35	1	149	0.06
TOWING/TOWED	73	11	0	84	0.03
MILITARY	26	15	0	41	0.02
DRIVER TRAINING SCHOOL	27	10	0	37	0.01
FLAMMABLE LIQUIDS	7	2	0	9	0.00
GASES	2	3	0	5	0.00
EXPLOSIVES	4	0	0	4	0.00
SPECIFIED MISCELLANEOUS SUBSTANCES	1	0	0	1	0.00
OTHER	1,262	137	2	1,401	0.60
UNKNOWN	31,921	2,356	9	34,286	12.83
TOTAL	206,698	59,836	782	267,316	100.00

NOTE: This report includes vehicles, bicycles and miscellaneous unclassified entities.

NUMBER OF VEHICLES INVOLVED IN ACCIDENTS DURING 1989 BY DANGEROUS GOODS CARRIED

DANGEROUS GOODS CARRIED	ACCIDENT TYPE			TOTAL VEHICLES	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
FLAMMABLE LIQUIDS	7	2	0	9	47.37
GASES	2	3	0	5	26.32
EXPLOSIVES	4	0	0	4	21.05
SPECIFIED MISCELLANEOUS SUBSTANCES	1	0	0	1	5.26
TOTAL	14	5	0	19	100.00

SECTION 11

ALCOHOL RELATED ACCIDENTS

1989 ACCIDENTS - ALCOHOL INVOLVEMENT

The trend evident from 1988 statistics continued in 1989, with little or no increase in alcohol related accidents, but a decline in alcohol related fatalities. In this case, accidents declined slightly (0.4%), while fatalities fell by 32%. Over the last two years, fatalities have dropped by 39%.

One statistic which remains high, however, is the distribution of drivers with alcohol as a contributing factor among age groups. Ages 21-25 have the highest incidence level. However, the age 16-20 age group, with the third highest incidence level, is relatively high considering that most of the drivers in that group have not yet reach legal drinking age.

Alcohol involvement diminishes as the driving age increases. However, this may be as much a result of fewer drivers in these age groups as differing behaviour patterns among age groups.

As chapter 3 relates, alcohol is the major contributing factor in 22% of accidents involving fatalities, and in 25% of all fatalities.

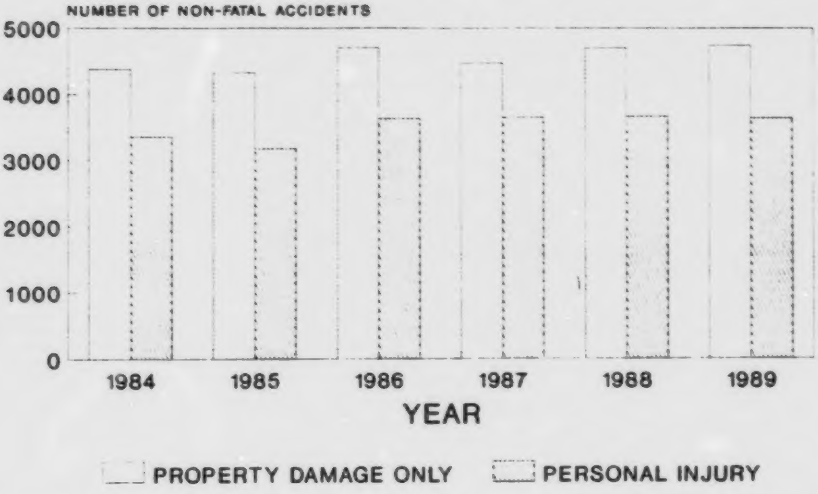
The highest incidence of alcohol-related accidents is on the weekend, from 2 to 7 pm.

Confidence in these statistics should be limited. The alcohol involvement could be overstated becaue accidents in which alcohol involvement is suspected but not verified are included. Results may be understated, in the case of fatalities, because not all victims are forensically tested for blood-alcohol content (BAC) levels. In 1988, only 78.1% of fatalities had their BAC levels measured.

1989 ALCOHOL RELATED ACCIDENTS

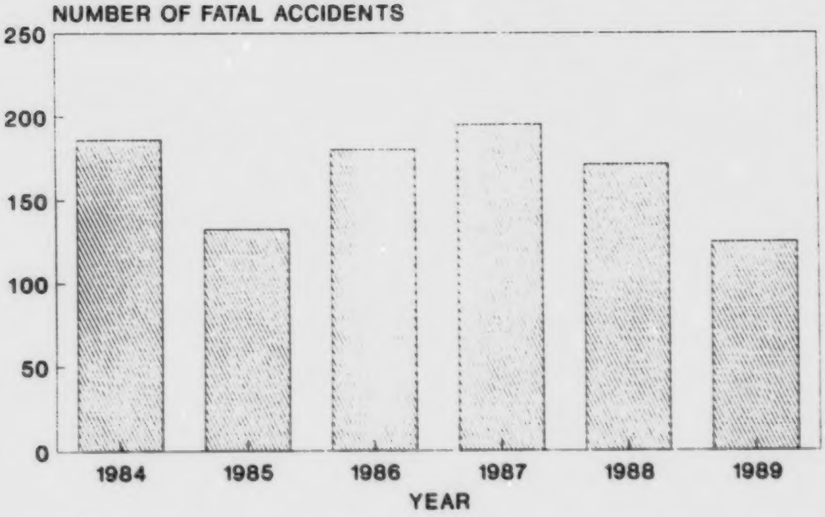
ACCIDENTS AND VICTIMS BY MONTH

MONTH	ACCIDENTS				VICTIMS		
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL	TOTAL ACCIDENTS	INJURED	KILLED	TOTAL VICTIMS
JANUARY	360	243	9	612	392	10	402
FEBRUARY	338	219	6	563	354	9	363
MARCH	376	290	4	670	454	5	459
APRIL	356	294	13	663	470	14	484
MAY	355	327	9	691	523	11	534
JUNE	377	325	13	715	508	18	526
JULY	422	361	22	805	605	23	628
AUGUST	404	314	11	729	524	11	535
SEPTEMBER	401	341	15	757	557	18	575
OCTOBER	447	331	6	784	509	6	515
NOVEMBER	440	321	9	770	507	12	519
DECEMBER	462	267	7	736	403	9	412
TOTAL	4,738	3,633	124	8,495	5,806	146	5,952



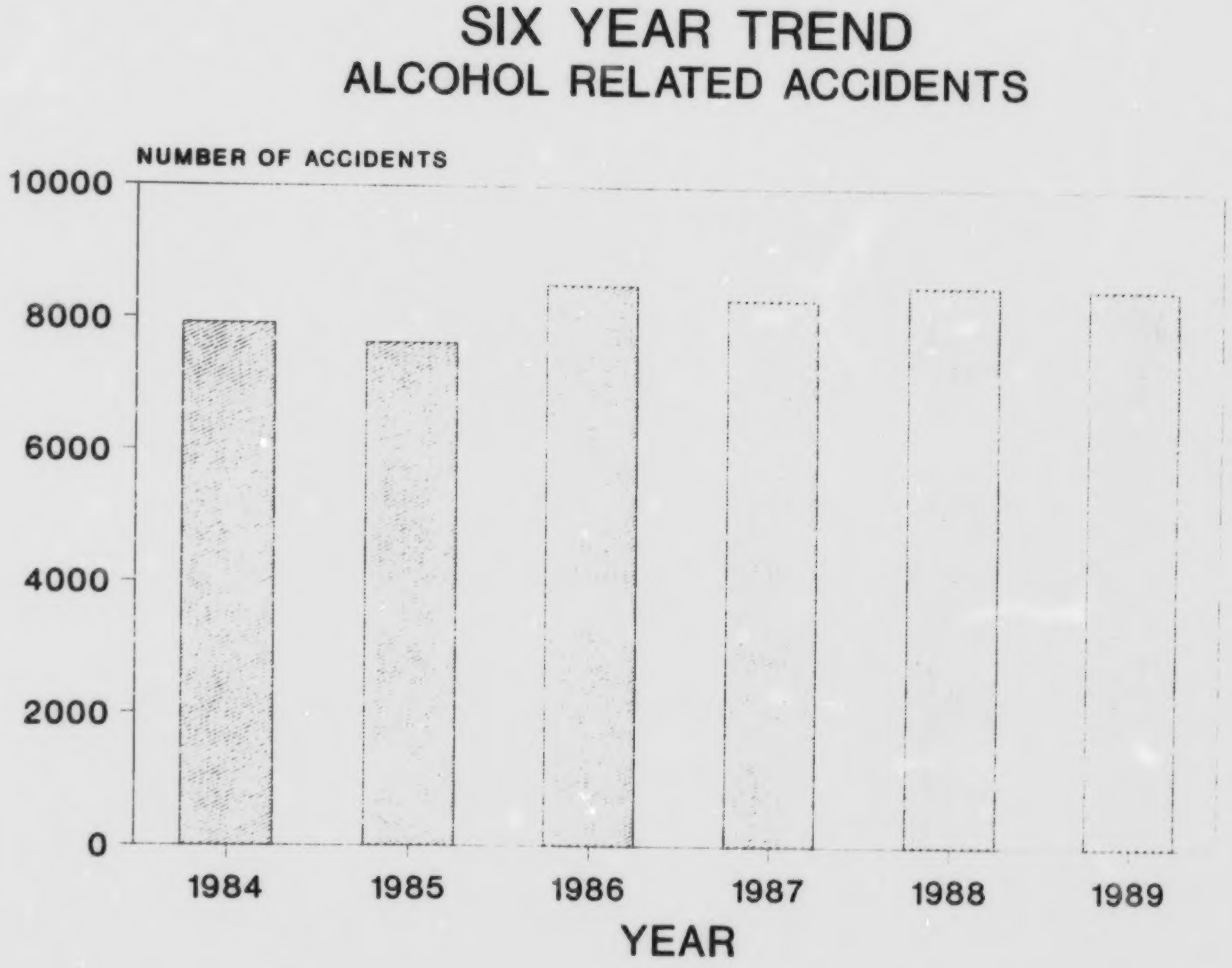
SIX YEAR SUMMARY
NON-FATAL ALCOHOL RELATED ACCIDENTS
(1984-1989)

fig. 27



SIX YEAR SUMMARY
ALCOHOL RELATED FATAL ACCIDENTS
(1984 - 1989)

fig. 28



SIX YEAR TREND
ALCOHOL RELATED ACCIDENTS

fig. 29

1989 ALCOHOL RELATED ACCIDENTS

PROPERTY DAMAGE ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

ACCIDENT HOUR	DAY OF WEEK							TOTAL ACCIDENTS	PERCENT OF TOTAL
	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.		
Mid. - 1 am	77	28	27	30	30	36	100	328	6.92
1 am - 2 am	111	21	31	40	47	63	130	443	9.35
2 am - 3 am	148	8	35	48	58	79	147	523	11.04
3 am - 4 am	78	13	15	19	25	25	95	270	5.70
4 am - 5 am	47	7	9	9	15	16	47	150	3.17
5 am - 6 am	37	7	4	6	6	6	34	100	2.11
6 am - 7 am	25	0	3	5	5	6	16	60	1.27
7 am - 8 am	11	5	5	2	9	4	18	54	1.14
8 am - 9 am	13	1	5	4	6	7	21	57	1.20
9 am - 10 am	15	1	4	6	3	4	9	42	0.89
10 am - 11 am	8	2	1	6	7	3	13	40	0.84
11 am - Noon	13	4	6	4	7	10	10	54	1.14
Noon - 1 pm	7	5	4	2	5	11	16	50	1.06
1 pm - 2 pm	16	3	3	1	5	10	13	51	1.08
2 pm - 3 pm	13	8	5	6	13	16	19	80	1.69
3 pm - 4 pm	19	12	8	16	13	14	29	111	2.34
4 pm - 5 pm	28	21	16	17	13	26	29	150	3.17
5 pm - 6 pm	26	15	19	17	32	35	54	198	4.18
6 pm - 7 pm	39	17	23	26	23	46	53	227	4.79
7 pm - 8 pm	48	24	18	35	23	60	47	255	5.38
8 pm - 9 pm	32	27	27	27	38	64	60	275	5.80
9 pm - 10 pm	36	29	31	28	46	82	54	306	6.46
10 pm - 11 pm	35	38	37	28	47	89	66	340	7.18
11 pm - Mid.	43	34	34	40	51	89	102	393	8.29
UNKNOWN	30	19	16	12	25	26	53	181	3.82
TOTAL	955	349	386	434	552	827	1,235	4,738	100.00

1989 ALCOHOL RELATED ACCIDENTS

PERSONAL INJURY ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

ACCIDENT HOUR	DAY OF WEEK							TOTAL ACCIDENTS	PERCENT OF TOTAL
	SUN	MON	TUES	WED	THURS	FRI	SAT		
Mid. - 1 am	54	25	23	29	32	36	71	270	7.43
1 am - 2 am	88	16	24	34	27	40	72	301	9.28
2 am - 3 am	105	7	25	23	46	42	115	363	9.99
3 am - 4 am	63	8	13	8	18	17	64	191	5.26
4 am - 5 am	38	3	4	6	10	11	36	108	2.97
5 am - 6 am	20	2	2	4	8	5	25	66	1.82
6 am - 7 am	14	4	3	3	4	6	22	56	1.54
7 am - 8 am	11	0	4	4	2	3	10	34	0.94
8 am - 9 am	5	2	2	3	3	3	13	31	0.85
9 am - 10 am	8	2	2	1	1	2	9	25	0.69
10 am - 11 am	7	3	3	2	1	3	13	32	0.88
11 am - Noon	6	7	4	2	5	0	11	35	0.96
Noon - 1 pm	6	2	3	2	5	5	9	32	0.88
1 pm - 2 pm	12	2	7	2	7	3	7	40	1.10
2 pm - 3 pm	9	3	6	4	8	12	19	61	1.68
3 pm - 4 pm	10	13	14	4	13	14	24	92	2.53
4 pm - 5 pm	22	9	13	14	14	12	32	116	3.19
5 pm - 6 pm	35	20	14	15	24	28	45	181	4.98
6 pm - 7 pm	31	13	17	12	18	43	54	188	5.17
7 pm - 8 pm	35	19	25	24	27	42	35	207	5.70
8 pm - 9 pm	30	22	31	35	35	58	33	244	6.72
9 pm - 10 pm	25	31	27	31	34	62	46	256	7.05
10 pm - 11 pm	24	24	27	32	38	69	69	283	7.79
11 pm - Mid.	29	21	29	31	40	86	75	311	8.56
UNKNOWN	22	9	8	10	12	16	33	110	3.03
TOTAL	709	267	330	335	432	618	942	3,633	100.00

1989 ALCOHOL RELATED ACCIDENTS

FATAL ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

ACCIDENT HOUR	DAY OF WEEK							TOTAL ACCIDENTS	PERCENT OF TOTAL
	SUN	MON	TUES	WED	THURS	FRI	SAT		
Mid. - 1 am	2	2	0	0	0	4	6	14	11.29
1 am - 2 am	3	3	1	1	0	0	3	11	8.87
2 am - 3 am	4	0	1	0	1	2	9	17	13.71
3 am - 4 am	0	0	0	0	1	1	1	3	2.42
4 am - 5 am	1	0	0	1	1	0	2	5	4.03
5 am - 6 am	1	1	0	0	0	1	2	5	4.03
6 am - 7 am	2	0	0	0	0	0	2	4	3.23
7 am - 8 am	0	0	0	0	0	0	0	0	0.00
8 am - 9 am	0	0	1	0	0	0	1	2	1.61
9 am - 10 am	1	0	0	0	0	0	0	1	0.81
10 am - 11 am	0	0	0	0	0	0	1	1	0.00
11 am - Noon	0	0	0	0	0	0	0	0	0.00
Noon - 1 pm	0	0	0	0	0	0	0	0	0.00
1 pm - 2 pm	0	0	0	0	0	0	1	1	0.81
2 pm - 3 pm	1	0	1	1	0	0	1	4	3.23
3 pm - 4 pm	0	2	0	0	0	2	1	5	4.03
4 pm - 5 pm	1	0	0	1	0	2	2	6	4.84
5 pm - 6 pm	2	0	0	0	0	2	0	4	3.23
6 pm - 7 pm	1	0	1	1	0	3	0	6	4.84
7 pm - 8 pm	0	1	1	3	0	2	2	9	7.26
8 pm - 9 pm	2	1	0	1	1	0	1	6	4.84
9 pm - 10 pm	0	0	1	0	0	0	4	5	4.03
10 pm - 11 pm	0	0	2	0	1	0	2	5	4.03
11 pm - Mid.	1	0	2	0	0	4	2	9	7.26
UNKNOWN	0	0	0	0	0	0	1	1	0.81
TOTAL	22	10	11	9	5	23	44	124	100.00

DRIVERS WITH ALCOHOL FACTOR INVOLVED IN 1989 ACCIDENTS

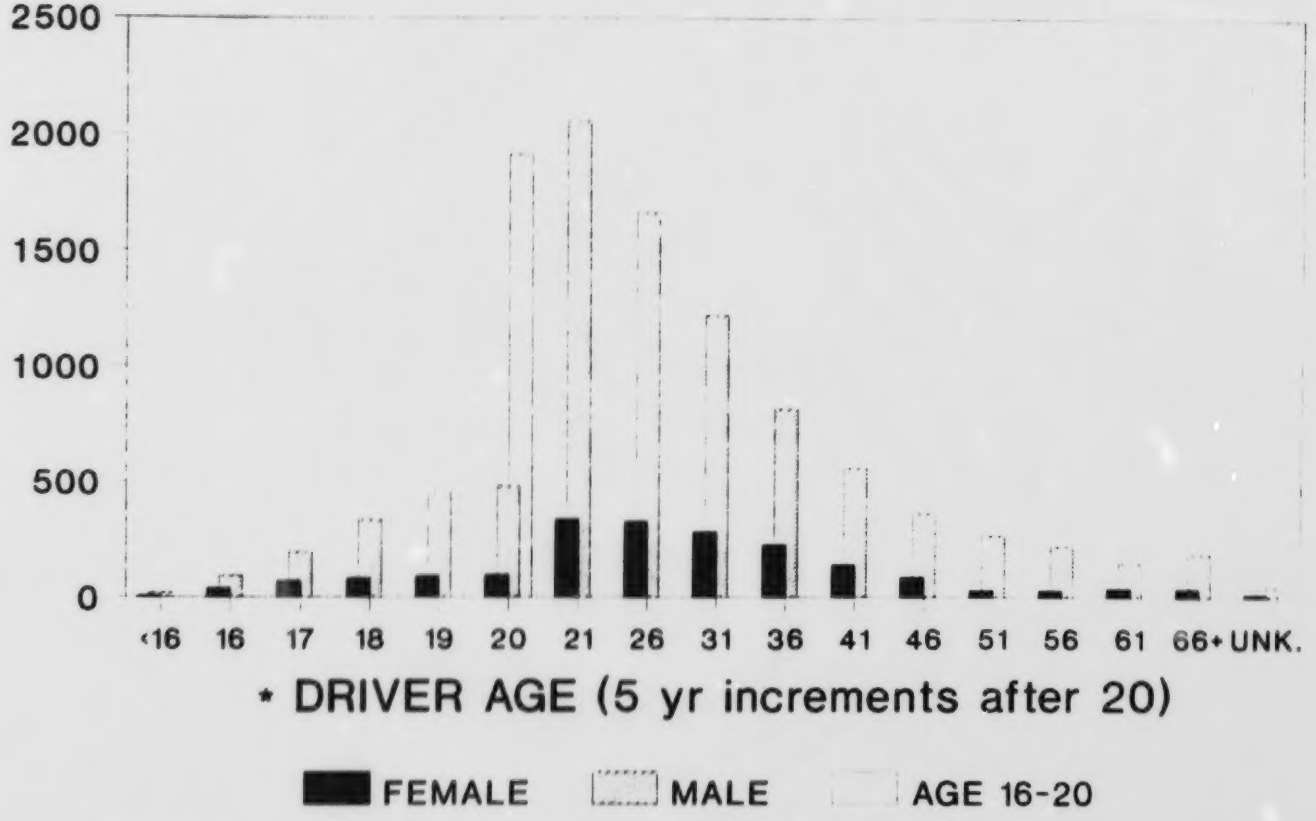


fig. 30

1989 ALCOHOL RELATED ACCIDENTS

ALL ACCIDENTS BY DAY OF WEEK AND ACCIDENT HOUR

ACCIDENT HOUR	DAY OF WEEK							TOTAL ACCIDENTS	PERCENT OF TOTAL
	SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.		
Mid. - 1 am	133	55	50	59	62	76	177	612	7.20
1 am - 2 am	202	40	56	75	74	103	205	755	8.89
2 am - 3 am	257	15	61	71	105	123	271	903	10.63
3 am - 4 am	141	21	28	27	44	43	160	464	5.46
4 am - 5 am	86	10	13	16	26	27	85	263	3.10
5 am - 6 am	58	10	6	10	14	12	61	171	2.01
6 am - 7 am	41	4	6	8	9	12	40	120	1.41
7 am - 8 am	22	5	9	6	11	7	28	88	1.04
8 am - 9 am	18	3	8	7	9	10	35	90	1.06
9 am - 10 am	24	3	6	7	4	6	18	68	0.80
10 am - 11 am	15	5	4	8	8	6	27	73	0.86
11 am - Noon	19	11	10	6	12	10	21	89	1.05
Noon - 1 pm	13	7	7	4	10	16	25	82	0.97
1 pm - 2 pm	28	5	10	3	12	13	21	92	1.08
2 pm - 3 pm	23	11	12	11	21	28	39	145	1.71
3 pm - 4 pm	29	27	22	20	26	30	54	208	2.45
4 pm - 5 pm	51	30	29	32	27	40	63	272	3.20
5 pm - 6 pm	63	35	55	32	56	65	99	383	4.51
6 pm - 7 pm	71	30	41	39	41	92	107	421	4.96
7 pm - 8 pm	83	44	44	62	50	104	84	471	5.54
8 pm - 9 pm	64	50	58	63	74	122	94	525	6.18
9 pm - 10 pm	61	60	59	59	80	144	104	567	6.67
10 pm - 11 pm	59	62	66	60	86	158	137	628	7.39
11 pm - Mid.	73	55	65	71	91	179	179	713	8.39
UNKNOWN	52	28	24	22	37	42	87	292	3.44
TOTAL	1,686	626	727	774	989	1,468	2,221	8,495	100.00

1989 ALCOHOL RELATED ACCIDENTS
BY ACCIDENT HOUR

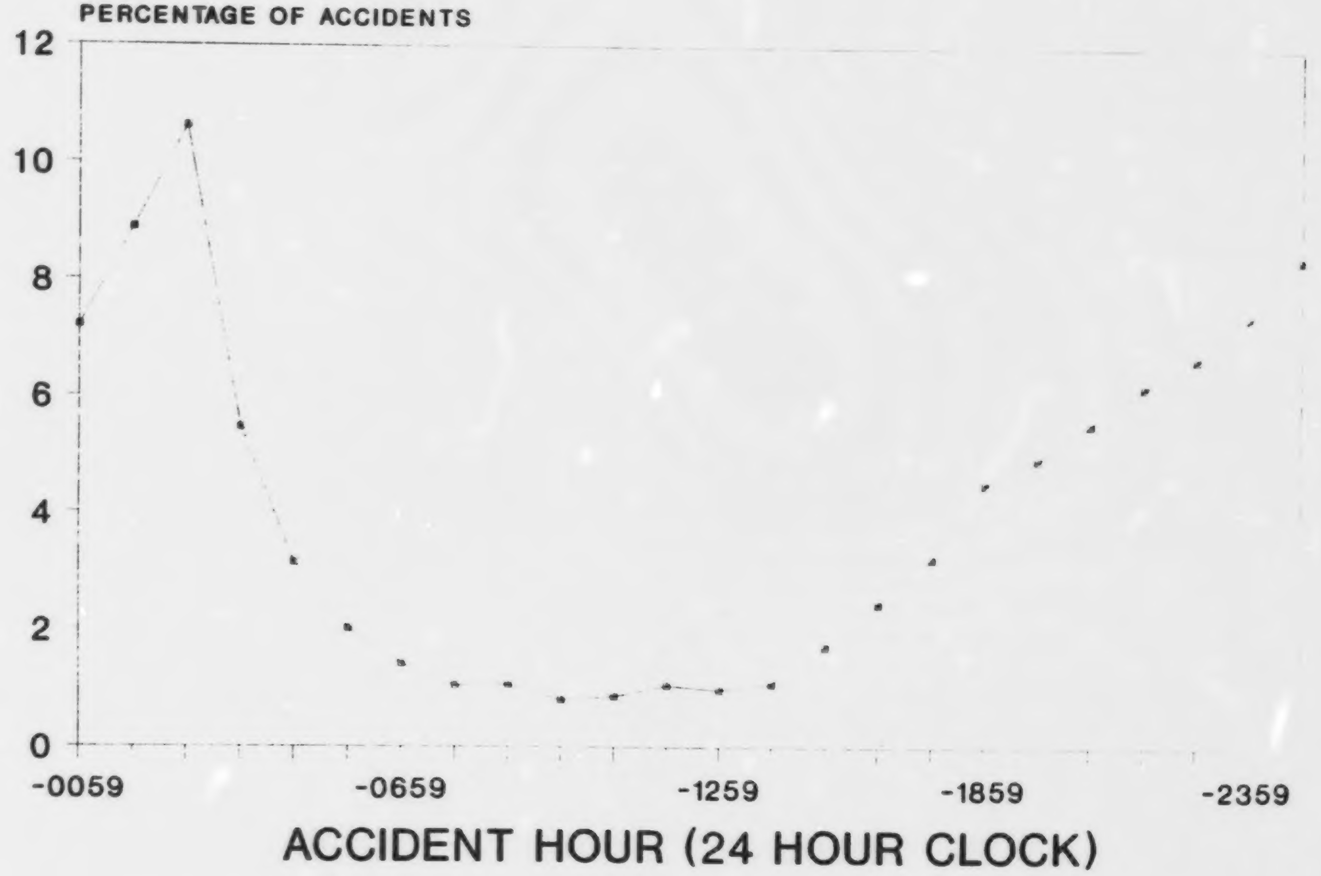


fig. 31

1989 ALCOHOL RELATED ACCIDENTS
DRIVER AGE BY ACCIDENT TYPE

- ALL DRIVERS INVOLVED -

DRIVER AGE	ACCIDENT TYPE			TOTAL DRIVERS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
1 - 5	0	0	0	0	0.00
6 - 10	0	0	0	0	0.00
11 - 15	12	9	1	22	0.19
16	72	54	2	128	1.09
17	148	111	1	260	2.22
18	210	200	4	414	3.53
19	290	245	8	543	4.63
20	283	277	13	573	4.89
21 - 25	1,275	1,088	35	2,398	20.46
26 - 30	1,051	914	28	1,993	17.00
31 - 35	797	683	22	1,502	12.81
36 - 40	562	469	12	1,043	8.90
41 - 45	362	321	14	697	5.95
46 - 50	242	198	7	447	3.81
51 - 55	171	146	3	320	2.73
56 - 60	137	108	3	248	2.12
61 - 65	102	76	5	183	1.56
66 - 70	65	50	2	117	1.00
71 - 75	38	27	0	65	0.55
76 - 80	17	7	0	24	0.20
81 - 85	3	7	0	10	0.09
OVER 85	2	1	0	3	0.03
UNKNOWN	543	187	1	731	6.24
TOTAL	6,382	5,178	161	11,721	100.00

1989 ALCOHOL RELATED ACCIDENTS
DRIVER AGE BY ACCIDENT TYPE

- DRIVERS WITH ALCOHOL FACTOR ONLY -

DRIVER AGE	ACCIDENT TYPE			TOTAL DRIVERS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
1 - 5	0	0	0	0	0.00
6 - 10	0	0	0	0	0.00
11 - 15	12	9	1	22	0.26
16	49	33	2	84	1.00
17	102	71	1	174	2.08
18	146	143	3	292	3.48
19	214	184	7	405	4.83
20	229	196	12	437	5.21
21 - 25	999	838	28	1,865	22.24
26 - 30	787	628	22	1,437	17.14
31 - 35	591	460	16	1,067	12.73
36 - 40	372	294	8	674	8.04
41 - 45	249	177	7	433	5.16
46 - 50	152	125	5	282	3.36
51 - 55	107	72	3	182	2.17
56 - 60	92	49	1	142	1.69
61 - 65	63	41	1	105	1.25
66 - 70	41	25	2	68	0.81
71 - 75	30	10	0	40	0.48
76 - 80	14	4	0	18	0.21
81 - 85	3	3	0	6	0.07
OVER 85	1	1	0	2	0.02
UNKNOWN	516	133	1	650	7.75
TOTAL	4,769	3,496	120	8,385	100.00

1989 ALCOHOL RELATED ACCIDENTS

VICTIMS INJURED BY VICTIM AGE AND ROAD USER CLASS

VICTIM AGE	DRIVER	PASSENGER	BICYCLIST	PEDESTRIAN	M/C DRIVER	M/C PASSENGER	UNKNOWN/ OTHER	TOTAL INJURED	PERCENT OF TOTAL
1	0	12	0	0	0	0	1	13	0.12
2	0	8	0	1	0	0	0	9	0.12
3	1	7	0	1	0	0	0	7	0.16
4	0	9	0	0	0	0	1	12	0.03
5	0	14	0	1	0	0	0	15	0.05
6 - 10	1	41	3	3	0	0	0	48	1.10
11 - 15	8	104	6	8	0	1	3	130	2.22
16	40	95	1	7	1	0	0	144	2.22
17	72	107	1	12	1	0	1	194	4.16
18	131	150	0	7	11	3	0	302	5.45
19	154	167	5	11	6	2	1	346	5.90
20	172	141	1	15	12	1	2	344	5.74
21 - 25	667	449	7	53	46	4	7	1,233	22.71
26 - 30	548	272	10	31	40	6	4	911	14.60
31 - 35	419	139	7	33	26	4	5	633	9.83
36 - 40	266	85	6	31	13	0	1	402	6.58
41 - 45	185	60	5	20	6	2	0	278	4.60
46 - 50	104	52	1	13	3	0	1	174	3.00
51 - 55	81	26	1	8	0	0	1	117	2.34
56 - 60	57	27	0	12	0	0	0	96	2.04
61 - 65	30	23	0	4	0	0	0	57	1.13
66 - 70	30	17	0	1	0	0	1	49	0.88
71 - 75	18	8	0	0	0	0	0	26	0.71
76 - 80	4	2	0	2	0	0	0	8	0.24
81 - 85	3	3	0	0	0	0	0	6	0.05
OVER 85	1	4	0	0	0	0	0	5	0.07
UNKNOWN	15	202	3	17	1	7	0	247	3.95
TOTAL	3,009	2,224	57	289	166	30	31	5,806	100.00

1989 ALCOHOL RELATED ACCIDENTS

VICTIMS KILLED BY VICTIM AGE AND ROAD USER CLASS

VICTIM AGE	DRIVER	PASSENGER	BICYCLIST	PEDESTRIAN	M/C DRIVER	M/C PASSENGER	UNKNOWN/ OTHER	TOTAL KILLED	PERCENT OF TOTAL
1	0	2	0	0	0	0	2	4	0.00
2	0	1	0	0	0	0	0	1	0.00
3	0	0	0	0	0	0	0	0	0.00
4	0	0	0	0	0	0	0	0	0.00
5	0	0	0	0	0	0	0	0	0.00
6 - 10	0	0	0	0	0	0	0	0	0.51
11 - 15	0	0	0	1	1	0	0	2	2.03
16	0	0	0	0	0	0	0	0	2.03
17	0	1	0	0	0	0	0	1	5.07
18	2	6	0	0	0	0	0	8	4.06
19	6	3	0	1	0	0	0	10	9.14
20	3	3	0	0	1	0	0	7	3.04
21 - 25	15	15	1	2	2	0	0	35	24.36
26 - 30	17	7	0	2	1	0	0	27	17.76
31 - 35	7	2	7	2	0	1	1	13	4.06
36 - 40	7	4	0	0	1	0	0	12	8.12
41 - 45	4	1	0	2	0	0	0	7	7.11
46 - 50	3	0	0	1	1	0	0	5	1.52
51 - 55	2	1	0	1	0	0	0	4	2.30
56 - 60	2	0	0	1	0	0	0	3	2.54
61 - 65	3	0	0	0	0	0	0	3	1.02
66 - 70	1	0	0	0	0	0	0	1	2.54
71 - 75	0	1	0	0	0	0	0	1	0.00
76 - 80	0	0	0	1	0	0	0	1	1.02
81 - 85	0	0	0	1	0	0	0	1	1.02
OVER 85	0	0	0	0	0	0	0	0	1.02
UNKNOWN	0	0	0	0	0	0	0	0	0.00
TOTAL	72	47	1	15	7	1	3	146	100.00

1989 ALCOHOL RELATED ACCIDENTS
VICTIMS INJURED BY VICTIM AGE AND ROAD USER CLASS

- VICTIMS IN DRINKING DRIVERS VEHICLE ONLY -

VICTIM AGE	DRIVER	PASSENGER	BICYCLIST	PEDESTRIAN	M/C DRIVER	M/C PASSENGER	UNKNOWN/ OTHER	TOTAL INJURED	PERCENT OF TOTAL
1	0	4	0	0	0	0	1	5	0.12
2	1	5	0	0	0	0	0	6	0.15
3	0	2	0	0	0	0	0	2	0.05
4	0	3	0	0	0	0	1	4	0.09
5	0	4	0	0	0	0	0	4	0.09
6 - 10	1	14	0	0	0	0	0	15	0.37
11 - 15	8	58	0	2	0	1	3	72	1.78
16	24	65	1	4	0	0	0	94	2.32
17	49	90	0	8	1	0	1	149	3.68
18	96	111	0	4	10	2	0	223	5.50
19	126	137	2	10	6	2	1	284	7.01
20	128	112	0	7	10	1	2	260	6.41
21 - 25	522	334	6	34	39	4	5	944	23.29
26 - 30	398	197	9	21	33	5	4	667	16.45
31 - 35	296	102	5	22	25	3	4	457	11.27
36 - 40	167	52	4	25	12	0	1	261	6.44
41 - 45	105	32	2	13	4	2	0	158	3.90
46 - 50	67	29	0	11	3	0	1	111	2.74
51 - 55	44	8	0	6	0	0	0	58	1.43
56 - 60	25	12	0	7	0	0	0	44	1.09
61 - 65	15	8	0	2	0	0	0	25	0.62
66 - 70	17	5	0	1	0	0	0	23	0.57
71 - 75	7	0	0	0	0	0	0	7	0.17
76 - 80	3	0	0	2	0	0	0	5	0.12
81 - 85	2	1	0	0	0	0	0	3	0.07
OVER 85	1	1	0	0	0	0	0	2	0.05
UNKNOWN	12	143	3	4	1	6	3	171	4.22
TOTAL	2,114	1,529	32	183	144	26	26	4,054	100.00

1989 ALCOHOL RELATED ACCIDENTS
VICTIMS KILLED BY VICTIM AGE AND ROAD USER CLASS

- VICTIMS IN DRINKING DRIVERS VEHICLE ONLY -

VICTIM AGE	DRIVER	PASSENGER	BICYCLIST	PEDESTRIAN	M/C DRIVER	M/C PASSENGER	UNKNOWN/ OTHER	TOTAL KILLED	PERCENT OF TOTAL
1	0	1	0	0	0	0	1	2	0.00
2	0	0	0	0	0	0	0	0	0.00
3	0	0	0	0	0	0	0	0	0.00
4	0	0	0	0	0	0	0	0	0.00
5	0	0	0	0	0	0	0	0	0.00
6 - 10	0	0	0	0	0	0	0	0	0.00
11 - 15	0	0	0	0	1	0	0	1	1.86
16	0	0	0	0	0	0	0	0	1.86
17	0	1	0	0	0	0	0	1	5.59
18	2	6	0	0	0	0	0	8	4.35
19	6	3	0	1	0	0	0	10	11.18
20	3	3	0	0	1	0	0	7	3.11
21 - 25	15	12	0	2	2	0	0	31	24.85
26 - 30	16	6	0	2	0	0	0	24	19.26
31 - 35	7	2	0	1	0	1	1	12	4.35
36 - 40	6	4	0	0	1	0	0	11	8.07
41 - 45	4	0	0	1	0	0	0	5	6.83
46 - 50	3	0	0	1	1	0	0	5	0.62
51 - 55	2	1	0	1	0	0	0	4	1.24
56 - 60	1	0	0	0	0	0	0	1	1.86
61 - 65	1	0	0	2	0	0	0	1	0.62
66 - 70	1	5	0	0	0	0	0	1	3.11
71 - 75	0	1	0	0	0	0	0	1	0.00
76 - 80	3	0	0	2	0	0	1	0	0.62
81 - 85	2	0	0	0	0	0	0	0	0.62
OVER 85	1	1	0	0	0	0	0	0	0.00
UNKNOWN	12	143	3	4	1	6	0	0	0.00
TOTAL	67	40	1	10	1	1	2	125	100.00

VICTIMS INJURED BY VICTIM AGE BY ROAD USER CLASS IN 1989 ALCOHOL RELATED ACCIDENTS

- VICTIMS NOT IN DRINKING DRIVER'S VEHICLE ONLY -

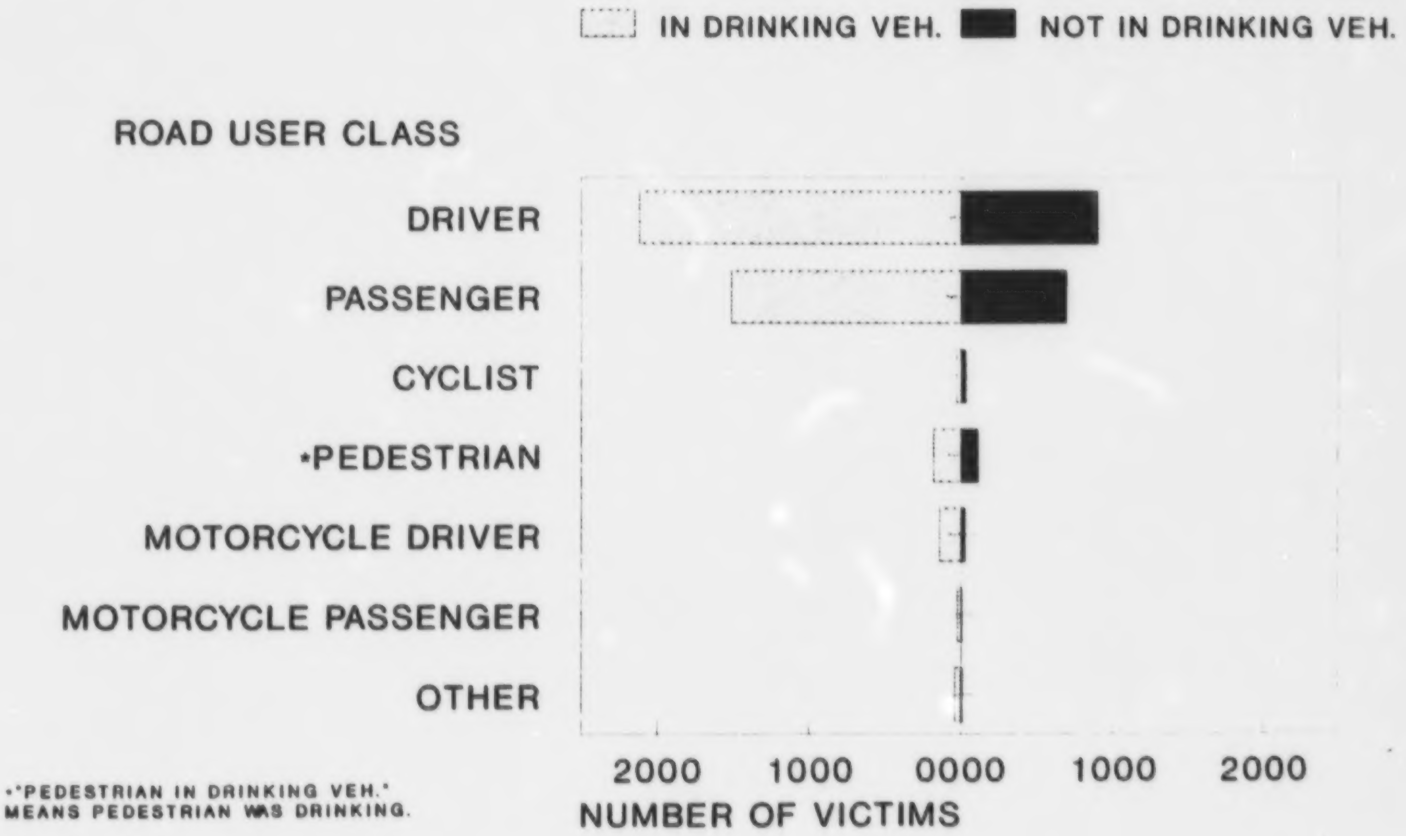
VICTIM AGE	DRIVER	PASSENGER	BICYCLIST	PEDESTRIAN	M/C DRIVER	M/C PASSENGER	UNKNOWN/ OTHER	TOTAL INJURED	PERCENT OF TOTAL
1	0	8	0	0	0	0	0	8	0.36
2	0	3	0	0	0	0	0	3	0.36
3	0	5	0	0	0	0	0	5	0.30
4	2	6	0	0	0	0	0	8	0.00
5	0	10	0	1	0	0	0	11	0.00
6 - 10	0	27	3	3	0	0	0	33	2.44
11 - 15	0	46	6	6	0	0	0	58	2.87
16	16	30	0	3	1	1	0	50	2.02
17	23	17	1	4	0	0	0	45	3.48
18	35	39	0	3	1	1	0	79	5.13
19	28	30	3	1	0	0	0	62	5.49
20	44	29	1	8	2	0	0	84	3.97
21 - 25	145	115	1	19	7	0	2	289	19.16
26 - 30	150	75	1	10	7	1	0	244	10.80
31 - 35	123	37	2	11	1	1	1	176	8.91
36 - 40	99	33	2	6	1	0	0	141	6.96
41 - 45	80	28	3	7	2	0	0	120	6.28
46 - 50	37	23	1	2	0	0	0	63	4.76
51 - 55	37	18	1	2	0	0	1	59	4.09
56 - 60	32	15	0	5	0	0	0	52	3.42
61 - 65	15	15	0	2	0	0	0	32	1.52
66 - 70	13	12	0	0	0	0	1	26	1.65
71 - 75	11	8	0	0	0	0	0	19	1.46
76 - 80	1	2	0	0	0	0	0	3	0.61
81 - 85	1	2	0	0	0	0	0	3	0.12
OVER 85	0	3	0	0	0	0	0	3	0.12
UNKNOWN	3	59	0	13	0	1	0	76	3.72
TOTAL	895	695	25	106	22	4	5	1,752	100.00

VICTIMS KILLED BY VICTIM AGE BY ROAD USER CLASS IN 1989 ALCOHOL RELATED ACCIDENTS

- VICTIMS NOT IN DRINKING DRIVER'S VEHICLE ONLY -

VICTIM AGE	DRIVER	PASSENGER	BICYCLIST	PEDESTRIAN	M/C DRIVER	M/C PASSENGER	UNKNOWN/ OTHER	TOTAL KILLED	PERCENT OF TOTAL
1	0	1	0	0	0	0	1	2	0.00
2	0	1	0	0	0	0	0	1	0.00
3	0	0	0	0	0	0	0	0	0.00
4	0	0	0	0	0	0	0	0	0.00
5	0	0	0	0	0	0	0	0	0.00
6 - 10	0	0	0	0	0	0	0	0	2.78
11 - 15	0	0	0	1	0	0	0	1	2.78
16	0	0	0	0	0	0	0	0	2.78
17	0	0	0	0	0	0	0	0	2.78
18	0	0	0	0	0	0	0	0	2.78
19	0	0	0	0	0	0	0	0	0.00
20	0	0	0	0	0	0	0	0	2.78
21 - 25	5	3	1	0	0	0	0	4	22.23
26 - 30	1	0	0	0	1	0	0	3	11.11
31 - 35	0	0	0	1	0	0	0	1	2.78
36 - 40	1	0	0	0	0	0	0	1	8.33
41 - 45	0	1	0	1	0	0	0	2	8.33
46 - 50	0	0	0	0	0	0	0	0	5.55
51 - 55	0	0	0	0	0	0	0	0	5.55
56 - 60	1	0	0	1	0	0	0	2	5.55
61 - 65	2	0	0	0	0	0	0	2	2.78
66 - 70	0	0	0	0	0	0	0	0	0.00
71 - 75	0	0	0	0	0	0	0	0	0.00
76 - 80	0	0	0	1	0	0	0	1	2.78
81 - 85	0	0	0	1	0	0	0	1	2.78
OVER 85	0	0	0	0	0	0	0	0	5.55
UNKNOWN	0	0	0	0	0	0	0	0	0.00
TOTAL	5	7	1	6	1	0	1	21	100.00

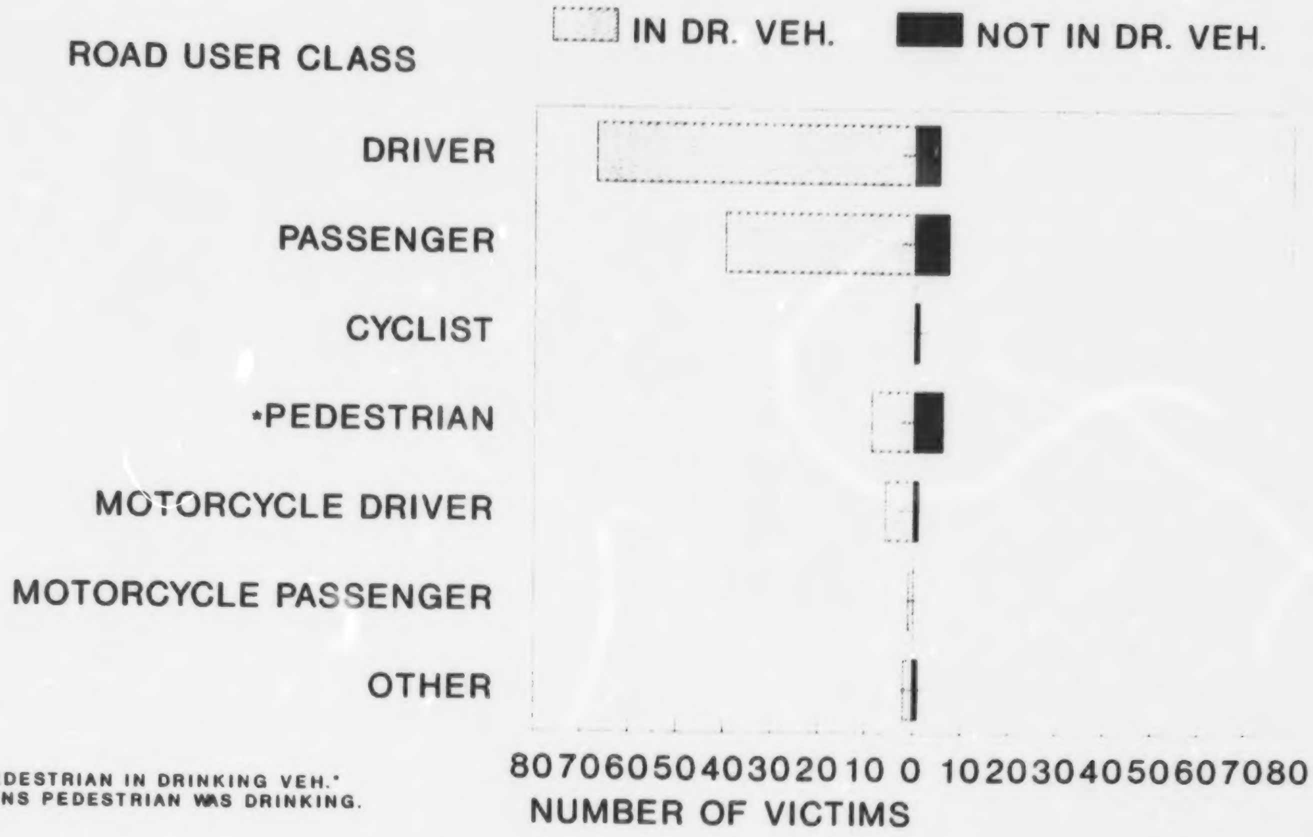
VICTIMS INJURED IN ALCOHOL ACCIDENTS IN/NOT IN DRINKING DRIVERS VEHICLE



*"PEDESTRIAN IN DRINKING VEH."
MEANS PEDESTRIAN WAS DRINKING.

fig. 32

VICTIMS KILLED IN ALCOHOL ACCIDENTS IN/NOT IN DRINKING DRIVERS VEHICLE



*"PEDESTRIAN IN DRINKING VEH." MEANS PEDESTRIAN WAS DRINKING.

fig. 33

SECTION 12

MOTORCYCLE ACCIDENTS

1989 ACCIDENTS - MOTORCYCLES

There were 46,856 motorcycles licenced in 1989, a 29% decrease from 1988.

During this period, drivers licenced to drive motorcycles (class 6) totalled 181,735, a 4.7% increase from the previous year.

Motorcycle drivers injured totalled 1466, a decrease of 7.2% from 1988, while motorcycle passengers injured totalled 224, a decrease from 1988 of 7.8%.

Twenty-seven motorcycle drivers and 4 motorcycle passengers were fatally injured in 1989 while during 46 drivers and 1 passenger were killed in 1988.

The major contributing factors in accidents assigned to motorcycle drivers were: driving without due care, failing to yield the right of way, unsafe speed, alcohol involvement and driver inexperience. These proportions have changed little from 1988.

1989 MOTORCYCLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- ALL DRIVERS/VEHICLES INVOLVED -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	73	253	6	332	16.43
FAILING TO YIELD RIGHT OF WAY	52	263	5	320	15.83
DRIVING AT UNSAFE SPEED	22	156	9	187	9.25
ALCOHOL INVOLVEMENT	22	150	6	178	8.81
DRIVER INEXPERIENCE	16	128	1	145	7.17
FOLLOWING TOO CLOSELY	24	60	0	84	4.16
IMPROPER TURNING	7	55	1	63	3.12
IMPROPER PASSING	11	45	1	57	2.82
IGNORING TRAFFIC CONTROL DEVICE	7	40	1	48	2.38
AVOIDING VEH/PED/CYCLE	12	34	0	46	2.28
BACKING UNSAFELY	39	4	0	43	2.13
CUTTING IN	13	29	0	42	2.08
OBSTRUCTION/DEBRIS ON ROAD	9	32	0	41	2.03
WEATHER CONDITION	9	26	0	35	1.73
WILD ANIMAL	1	26	0	27	1.34
VISIBILITY IMPAIRED	3	18	0	21	1.04
PAVEMENT CONDITION	3	16	1	20	0.99
DOMESTIC ANIMAL	4	15	0	19	0.94
FAILING TO SIGNAL	2	12	0	14	0.69
DRIVING ON WRONG SIDE OF ROAD	2	10	1	13	0.64
ROAD MAINTENANCE/ CONSTRUCTION	0	12	0	12	0.59
DEFECTIVE TIRES	3	8	0	11	0.54
ROAD/INTERSECTION DESIGN	0	7	2	9	0.45
DEFECTIVE BRAKES	2	5	0	7	0.35
DEFECTIVE ENGINE	1	6	0	7	0.35
PEDESTRIAN ERROR/ CONFUSION	0	7	0	7	0.35
SUNLIGHT GLARE	3	4	0	7	0.35
OTHER	49	176	1	226	11.18
TOTAL	389	1,597	35	2,021	100.00

NOTE: "OTHER" includes factors with less than 7 occurrences.

1989 MOTORCYCLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- MOTORCYCLE DRIVERS/VEHICLES ONLY -

	ACCIDENT TYPE				
CONTRIBUTING FACTORS	PROPERTY DAMAGE	PERSONAL INJURY	FATAL	TOTAL FACTORS	PERCENT OF TOTAL
DRIVING WITHOUT DUE CARE	41	182	6	229	18.19
DRIVING AT UNSAFE SPEED	18	142	9	169	13.42
ALCOHOL INVOLVEMENT	16	120	5	141	11.20
DRIVER INEXPERIENCE	15	120	1	136	10.80
FOLLOWING TOO CLOSELY	13	44	0	57	4.53
FAILING TO YIELD RIGHT OF WAY	14	40	1	55	4.37
IMPROPER PASSING	9	38	1	48	3.81
AVOIDING VEH/PED/CYCLE	9	31	0	40	3.18
OBSTRUCTION/DEBRIS ON ROAD	8	31	0	39	3.10
IGNORING TRAFFIC CONTROL DEVICE	5	24	1	30	2.38
WILD ANIMAL	1	26	0	27	2.14
WEATHER CONDITION	4	21	0	25	1.99
PAVEMENT CONDITION	3	16	1	20	1.59
DOMESTIC ANIMAL	4	14	0	18	1.43
CUTTING IN	8	7	0	15	1.19
VISIBILITY IMPAIRED	2	10	0	12	0.95
DRIVING ON WRONG SIDE OF ROAD	2	8	1	11	0.87
ROAD MAINTENANCE/ CONSTRUCTION	0	11	0	11	0.87
DEFECTIVE TIRES	2	8	0	10	0.79
IMPROPER TURNING	1	7	0	8	0.64
DEFECTIVE BRAKES	1	5	0	6	0.48
ROAD INTERSECTION DESIGN	0	4	1	5	0.40
OTHER	26	120	1	147	11.68
TOTAL	202	1,029	28	1,259	100.00

NOTE: "OTHER" includes factors with 5 or less occurrences.

1989 MOTORCYCLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- OTHER DRIVERS/VEHICLES ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
FAILING TO YIELD RIGHT OF WAY	38	223	4	265	34.78
DRIVING WITHOUT DUE CARE	32	71	0	103	13.52
IMPROPER TURNING	6	48	1	55	7.22
BACKING UNSAFELY	37	4	0	41	5.38
ALCOHOL INVOLVEMENT	6	30	1	37	4.86
CUTTING IN	5	22	0	27	3.54
FOLLOWING TOO CLOSELY	11	16	0	27	3.54
IGNORING TRAFFIC CONTROL DEVICE	2	16	0	18	2.36
DRIVING AT UNSAFE SPEED	4	14	0	18	2.36
FAILING TO SIGNAL	2	11	0	13	1.71
WEATHER CONDITION	5	5	0	10	1.31
DRIVER INEXPERIENCE	1	8	0	9	1.18
IMPROPER PASSING	2	7	0	9	1.18
VISIBILITY IMPAIRED	1	8	0	9	1.18
AVOIDING VEH/PED/CYCLE	3	3	0	6	0.79
PEDESTRIAN ERROR/ CONFUSION	0	6	0	6	0.79
SUNLIGHT GLARE	3	3	0	6	0.79
DEFECTIVE BRAKELIGHTS	1	3	0	4	0.52
INSECURE LOAD	2	2	0	4	0.52
NO DRIVER	3	1	0	4	0.52
ROAD/INTERSECTION DESIGN	0	3	1	4	0.52
DEFECTIVE ENGINE	1	2	0	3	0.39
INSUFFICIENT TRAFFIC CONTROL	0	3	0	3	0.39
DEFECTIVE TURN SIGNALS	1	1	0	2	0.26
DRIVING ON THE WRONG SIDE OF ROAD	0	2	0	2	0.26
OBSTRUCTION/DEBRIS ON ROAD	1	1	0	2	0.26
OTHER	20	55	0	75	9.84
TOTAL	187	568	7	762	100.00

NOTE: "OTHER" includes factors with less than 1 occurrence.

1989 MOTORCYCLE ACCIDENTS

PRIMARY ACCIDENT OCCURRENCE BY ACCIDENT TYPE

PRIMARY ACCIDENT OCCURRENCE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
REAR END	111	196	2	309	14.06
RIGHT ANGLE COLLISION	60	222	7	289	13.15
OFF ROAD - RIGHT	24	197	6	227	10.33
LEFT TURN - ACROSS ONCOMING TRAFFIC	35	130	3	168	7.64
OFF ROAD - LEFT	9	97	5	111	5.05
OVERTAKING	25	68	2	95	4.32
SIDE SWIPE	28	34	1	63	2.87
HEAD ON	12	46	3	61	2.78
LEFT TURN - HEAD ON	11	43	0	54	2.46
BACKING UP	44	6	0	50	2.27
LEFT TURN - ONE WAY	5	15	0	20	0.91
RIGHT TURN - REAR END	5	9	0	14	0.64
RIGHT TURN - SAME DIRECTION	1	11	0	12	0.55
RIGHT TURN - HEAD ON	2	9	0	11	0.50
ONE WAY STREET	2	4	0	6	0.27
RIGHT TURN - OPPOSITE DIRECTION	0	2	0	2	0.09
OTHER	190	345	3	538	24.48
UNKNOWN	64	103	1	168	7.64
TOTAL	628	1,537	33	2,198	100.00

NOTE: The primary accident occurrence categories were modified for 1987 data, therefore comparison between 1987 and prior years is not recommended.

1989 MOTORCYCLE ACCIDENTS

PRE-COLLISION ACTION BY ACCIDENT TYPE

PRE-COLLISION ACTION	ACCIDENT TYPE			TOTAL ACTIONS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
GOING STRAIGHT AHEAD	429	1,382	33	1,844	47.91
MAKING LEFT TURN	126	465	11	602	15.64
PARKED LEGALLY	206	52	3	261	6.78
STOPPED IN TRAFFIC	80	90	0	170	4.42
MAKING RIGHT TURN	50	92	0	142	3.69
SLOWING OR STOPPING	34	86	0	120	3.12
OVERTAKING	23	88	2	113	2.94
SKIDDING	20	81	4	105	2.73
CHANGING LANES	32	65	1	98	2.55
BACKING	75	6	0	81	2.10
SWERVING	15	20	2	37	0.96
MAKING U TURN	10	23	1	34	0.88
STARTING IN TRAFFIC	3	25	0	28	0.73
STARTING FROM PARKED POSITION	8	11	0	19	0.49
PARKED ILLEGALLY	6	6	0	12	0.31
MERGING	3	8	1	12	0.31
AVOIDING OBJECT ON ROAD	1	9	0	10	0.26
ENTERING PARKED POSITION	6	3	0	9	0.23
YAW	1	6	0	7	0.18
SPINNING	0	1	0	1	0.03
OTHER	12	18	0	30	0.78
UNKNOWN	72	41	1	114	2.96
TOTAL	1,212	2,578	59	3,849	100.00

NOTE: This table represents the pre-collision actions of all vehicles involved in the accidents.

1989 MOTORCYCLE ACCIDENTS

ACCIDENT LOCATION BY ACCIDENT TYPE

ACCIDENT LOCATION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BETWEEN INTERSECTIONS	256	634	14	904	41.13
AT INTERSECTION	220	641	18	879	39.99
ROAD/DRIVEWAY INTERSECTION	37	126	0	163	7.42
PARKING LOT	82	26	0	108	4.91
OFF HIGHWAY	7	24	1	32	1.46
BRIDGE	3	23	0	26	1.18
ENTRANCE RAMP	2	8	0	10	0.45
EXIT RAMP	0	6	0	6	0.27
RAILROAD CROSSING	2	4	0	6	0.27
INDUSTRIAL ROAD	0	6	0	6	0.27
ENTRANCE INTERSECTION	1	3	0	4	0.18
FERRY OR DOCK	2	0	0	2	0.09
EXIT DECELERATION LANE	1	1	0	2	0.09
EXIT INTERSECTION	1	1	0	2	0.09
ENTRANCE ACCELERATION LANE	1	1	0	2	0.09
OTHER	2	11	0	13	0.59
UNKNOWN	11	22	0	33	1.50
TOTAL	628	1,537	33	2,198	100.00

1989 MOTORCYCLE ACCIDENTS

ROADWAY SURFACE CONDITION BY ACCIDENT TYPE

SURFACE CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRY	511	1,339	33	1,883	85.67
WET	104	180	0	284	12.92
ICY	3	2	0	5	0.23
MUDDY	0	3	0	3	0.14
SNOW	2	0	0	2	0.09
SLUSH	0	1	0	1	0.05
OTHER	0	4	0	4	0.18
UNKNOWN	8	8	0	16	0.73
TOTAL	628	1,537	33	2,198	100.00

1989 MOTORCYCLE ACCIDENTS

LIGHTING CONDITION BY ACCIDENT TYPE

LIGHTING CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DAYLIGHT	427	1,074	18	1,519	69.11
DARK/SOME ILLUMINATION	67	183	6	256	11.65
DARK/FULL ILLUMINATION	73	112	1	186	8.46
DARK/NO ILLUMINATION	15	85	5	105	4.78
DUSK	23	57	2	82	3.73
DAWN	5	17	1	23	1.05
OTHER	1	0	0	1	0.05
UNKNOWN	17	9	0	26	1.18
TOTAL	628	1,537	33	2,198	100.00

1989 MOTORCYCLE ACCIDENTS

WEATHER CONDITION BY ACCIDENT TYPE

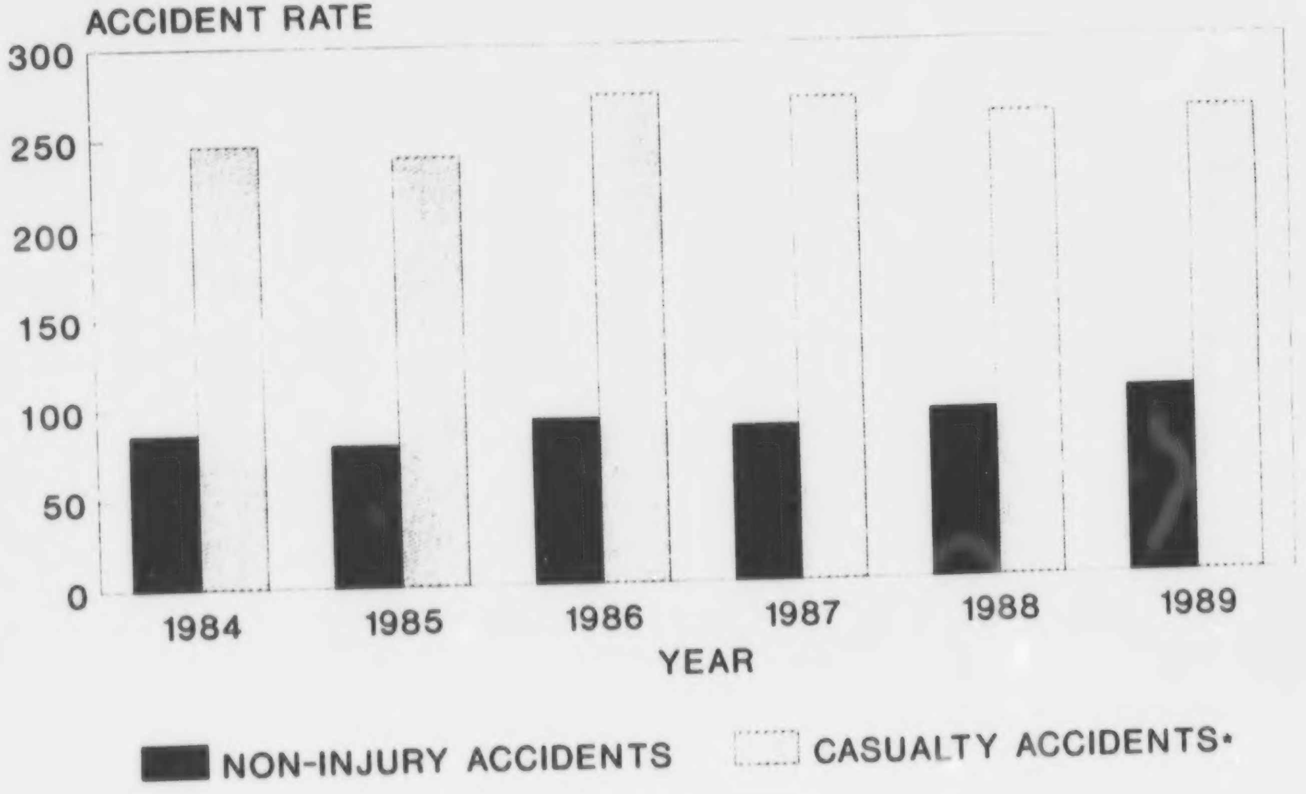
WEATHER CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
CLEAR	424	1,051	26	1,501	68.29
CLOUDY	126	364	7	497	22.61
RAIN	65	102	0	167	7.60
FOG	0	7	0	7	0.32
SNOW/SLEET	2	2	0	4	0.18
STRONG WIND	0	2	0	2	0.09
UNKNOWN	11	9	0	20	0.91
TOTAL	628	1,537	33	2,198	100.00

1989 MOTORCYCLE ACCIDENTS

ACCIDENT HOUR BY ACCIDENT TYPE

ACCIDENT HOUR	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
Mid. - 1 am	9	33	4	46	2.09
1 am - 2 am	16	31	1	48	2.18
2 am - 3 am	11	46	3	60	2.73
3 am - 4 am	3	10	0	13	0.59
4 am - 5 am	4	6	0	10	0.45
5 am - 6 am	2	9	1	12	0.55
6 am - 7 am	7	17	0	24	1.09
7 am - 8 am	23	44	1	68	3.09
8 am - 9 am	15	40	2	57	2.59
9 am - 10 am	9	28	0	37	1.68
10 am - 11 am	21	46	0	67	3.05
11 am - Noon	38	58	0	96	4.37
Noon - 1 pm	30	78	3	111	5.05
1 pm - 2 pm	37	83	3	123	5.60
2 pm - 3 pm	42	97	2	141	6.41
3 pm - 4 pm	43	105	0	148	6.73
4 pm - 5 pm	43	114	4	161	7.32
5 pm - 6 pm	48	150	2	200	9.10
6 pm - 7 pm	48	122	0	170	7.73
7 pm - 8 pm	34	101	0	135	6.14
8 pm - 9 pm	34	98	0	132	6.01
9 pm - 10 pm	26	81	3	110	5.00
10 pm - 11 pm	25	72	1	98	4.46
11 pm - Mid.	20	44	3	67	3.05
UNKNOWN	40	24	0	64	2.91
TOTAL	628	1,537	33	2,198	100.00

MOTORCYCLES IN ACCIDENTS PER 10,000 LICENCED MOTORCYCLES



*Includes personal injury & fatal accidents.

fig. 34

1989 MOTORCYCLE ACCIDENTS

DRIVER AGE BY ACCIDENT TYPE

- ALL DRIVERS/VEHICLES INVOLVED -

	ACCIDENT TYPE				
DRIVER AGE	PROPERTY DAMAGE	PERSONAL INJURY	FATAL	TOTAL DRIVERS	PERCENT OF TOTAL
1 - 5	0	1	0	1	0.03
6 - 10	0	9	0	9	0.23
11 - 15	3	40	1	44	1.14
16	14	36	2	52	1.35
17	15	94	0	109	2.83
18	33	100	1	134	3.48
19	37	127	2	166	4.31
20	57	143	4	204	5.30
21 - 25	174	545	13	732	19.02
26 - 30	142	362	7	511	13.28
31 - 35	108	301	4	413	10.73
36 - 40	80	215	4	299	7.77
41 - 45	53	145	5	203	5.27
46 - 50	37	102	5	144	3.74
51 - 55	27	72	1	100	2.60
56 - 60	25	54	1	80	2.08
61 - 65	14	46	0	60	1.56
66 - 70	11	31	2	44	1.14
71 - 75	7	24	1	32	0.83
76 - 80	5	13	1	19	0.49
81 - 85	1	5	0	6	0.16
86 - 90	0	1	0	1	0.03
OVER 95	0	0	0	0	0.00
UNKNOWN	369	112	5	486	12.63
TOTAL	1,212	2,578	59	3,849	100.00

1989 MOTORCYCLE ACCIDENTS

DRIVER AGE BY ACCIDENT TYPE

- MOTORCYCLE DRIVERS/VEHICLES ONLY -

DRIVER AGE	ACCIDENT TYPE			TOTAL DRIVERS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
1 - 5	0	1	0	1	0.05
6 - 10	1	4	1	4	0.19
11 - 15	2	34	1	37	1.79
16	5	19	2	26	1.26
17	6	56	0	62	3.00
18	22	70	1	93	4.50
19	24	95	2	121	5.86
20	42	104	3	149	7.22
21 - 25	127	403	9	539	26.10
26 - 30	79	249	5	333	16.13
31 - 35	54	199	2	255	12.35
36 - 40	30	125	3	158	7.65
41 - 45	14	76	1	91	4.41
46 - 50	9	47	2	58	2.81
51 - 55	3	23	1	27	1.31
56 - 60	2	16	1	19	0.92
61 - 65	2	9	0	11	0.53
66 - 70	0	2	0	2	0.10
71 - 75	0	2	0	2	0.10
76 - 80	1	2	0	3	0.15
81 - 85	1	0	0	1	0.05
86 - 90	0	0	0	0	0.00
OVER 95	0	0	0	0	0.00
UNKNOWN	57	16	0	73	3.54
TOTAL	480	1,552	33	2,065	100.00

1989 MOTORCYCLE ACCIDENTS

HELMET USAGE BY MOTORCYCLE DRIVERS AND PASSENGERS

SAFETY EQUIPMENT	DRIVERS NOT INJURED	PASSENGERS NOT INJURED	TOTAL NOT INJURED	PERCENT OF TOTAL
HELMET	198	25	223	35.85
NO HELMET	7	3	10	1.61
UNKNOWN	367	22	389	62.54
TOTAL	572	50	622	100.00

SAFETY EQUIPMENT	DRIVERS INJURED	PASSENGERS INJURED	TOTAL INJURED	PERCENT OF TOTAL
HELMET	840	119	959	56.74
NO HELMET	47	7	54	3.20
UNKNOWN	579	98	677	40.06
TOTAL	1,466	244	1,690	100.00

SAFETY EQUIPMENT	DRIVERS KILLED	PASSENGERS KILLED	TOTAL KILLED	PERCENT OF TOTAL
HELMET	23	1	24	77.42
NO HELMET	4	2	6	19.35
UNKNOWN	0	1	1	3.23
TOTAL	27	4	31	100.00

1989 MOTORCYCLE ACCIDENTS

MOTORCYCLE DRIVERS AND PASSENGERS INJURED AND KILLED BY HELMET USAGE AND LOCATION OF INJURY

SAFETY EQUIPMENT	INJURY LOCATION	DRIVERS INJURED	PASSENGERS INJURED	TOTAL INJURED	DRIVERS KILLED	PASSENGERS KILLED	TOTAL KILLED
HELMET	Abdomen-Pelvis	21	1	22	0	0	0
	Back	46	8	54	0	0	0
	Chest	24	3	27	1	1	2
	Elbow-Lower Arm-Hand	118	12	130	0	0	0
	Entire Body	69	8	77	9	0	9
	Eye	2	0	2	0	0	0
	Face/Nose	18	4	22	0	0	0
	Head	52	5	57	8	0	8
	Hip-Upper Leg	79	14	93	1	0	1
	Knee-Lower Leg-Foot	273	47	320	0	0	0
	Neck	35	7	42	3	0	3
	Shoulder-Upper Arm	88	8	96	0	0	0
	Unknown	15	2	17	1	0	1
SUBTOTAL		840	119	959	23	1	47
NO HELMET	Abdomen-Pelvis	2	0	2	1	0	1
	Back	4	1	5	0	0	0
	Chest	1	1	2	0	0	0
	Elbow-Lower Arm-Hand	1	0	1	0	0	0
	Entire Body	2	0	2	1	1	2
	Face/Nose	2	0	2	0	0	0
	Head	13	2	15	2	1	3
	Hip-Upper Leg	4	0	4	0	0	0
	Knee-Lower Leg-Foot	13	1	14	0	0	0
	Neck	2	0	2	0	0	0
	Shoulder-Upper Arm	3	2	5	0	0	0
SUBTOTAL		47	17	52	4	2	6
UNKNOWN	Abdomen-Pelvis	10	3	13	0	0	0
	Back	51	9	60	0	0	0
	Chest	17	0	17	0	0	0
	Elbow-Lower Arm-Hand	100	11	111	0	0	0
	Entire Body	25	8	33	0	1	1
	Face/Nose	17	3	20	0	0	0
	Head	33	8	41	0	0	0
	Hip-Upper Leg	55	10	65	0	0	0
	Knee-Lower Leg-Foot	181	29	210	0	0	0
	Neck	21	5	26	0	0	0
	Shoulder-Upper Arm	58	7	65	0	0	0
	Unknown	11	5	16	0	0	0
SUBTOTAL		579	98	677	0	1	1
TOTAL		1,466	224	1,690	27	4	31

1989 MOTORCYCLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY MOTORCYCLE DRIVER'S AGE

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	PERCENT OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
DRIVING WITHOUT DUE CARE	12	7	14	17	20	23	77	36	54	17	12	8	5	30	332	17.13
FAILING TO YIELD RIGHT OF WAY	4	8	10	14	11	15	53	34	52	42	29	26	17	5	320	17.41
DRIVING AT UNSAFE SPEED	0	5	6	24	20	22	55	36	23	5	4	0	0	5	187	8.66
ALCOHOL INVOLVEMENT	1	0	1	8	9	10	51	34	45	10	2	3	0	4	178	9.31
DRIVER INEXPERIENCE	18	7	11	14	9	8	34	12	16	9	5	0	0	2	145	6.86
FOLLOWING TOO CLOSELY	0	2	6	4	3	6	20	12	14	6	5	1	2	3	84	4.28
IMPROPER TURNING	2	1	1	2	6	2	8	9	11	10	3	4	2	1	63	1.89
IMPROPER PASSING	0	1	3	1	4	3	19	13	9	1	1	0	0	2	57	3.18
IGNORING TRAFFIC CONTROL DEVICE	1	2	3	1	0	5	13	8	8	2	2	1	1	1	48	1.89
AVOID VEH/PED/CYCLE	0	1	0	2	3	1	9	8	14	4	2	2	0	0	46	3.36
BACKING UNSAFELY	0	0	2	0	3	1	3	6	11	5	6	1	0	5	43	1.93
CUTTING IN	0	1	2	1	1	6	4	10	4	4	2	2	3	2	42	1.66
OBSTRUCTION/DEBRIS ON ROAD	0	0	0	0	4	5	12	6	5	6	0	3	0	0	41	2.40
WEATHER	0	0	1	2	1	2	13	1	9	5	0	0	0	1	35	1.43
WILD ANIMAL	0	0	0	1	1	2	0	4	11	6	2	0	0	0	27	1.52
VISIBILITY IMPAIRED	0	0	0	2	1	2	7	2	5	0	1	1	0	0	21	1.24
PAVEMENT CONDITION	0	0	0	0	0	1	3	3	7	4	1	0	1	0	20	1.20
OTHER	10	4	14	20	17	9	62	40	69	42	19	10	2	14	332	14.65
TOTAL	52	34	73	95	117	121	443	174	368	178	96	62	33	75	2,021	100.00

NOTE: "OTHER" includes those factors with less than 20 occurrences, as well as those unspecified factors not recorded in reports 3.1 to 3.5

1989 MOTORCYCLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS IN PROPERTY DAMAGE ACCIDENTS BY MOTORCYCLE DRIVER'S AGE

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	PERCENT OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
DRIVING WITHOUT DUE CARE	0	1	1	4	1	5	9	12	10	4	3	2	1	20	73	18.77
FAILING TO YIELD RIGHT OF WAY	0	3	2	1	2	0	7	4	12	9	7	3	0	2	52	13.37
BACKING UNSAFELY	0	0	2	0	2	1	2	6	9	5	6	1	0	5	39	10.03
FOLLOWING TOO CLOSELY	0	0	1	0	0	3	5	4	3	1	4	0	1	2	24	6.17
ALCOHOL INVOLVEMENT	0	0	0	0	1	1	10	4	2	1	1	0	0	2	22	5.66
DRIVING AT UNSAFE SPEED	0	0	0	2	1	2	6	5	2	0	0	0	0	4	22	5.66
DRIVER INEXPERIENCE	2	0	0	6	3	1	3	0	0	0	0	0	0	1	16	4.11
CUTTING IN	0	0	0	0	0	4	1	1	0	2	0	1	2	2	13	3.34
AVOIDING VEH/PED CYCLE	0	1	0	1	1	1	2	3	2	0	0	1	0	0	12	3.08
IMPROPER PASSING	0	0	0	0	1	0	4	1	1	1	1	0	0	2	11	2.83
OBSTRUCTION/DEBRIS ON ROAD	0	0	0	0	1	2	3	1	1	1	0	0	0	0	9	2.31
WEATHER	0	0	1	0	0	0	2	0	3	2	0	0	0	1	9	2.31
IGNORING TRAFFIC CONTROL DEVICE	0	0	0	0	0	2	1	2	0	1	0	0	1	0	7	1.80
IMPROPER TURNING	0	0	0	0	0	1	2	1	0	0	0	2	0	0	7	1.80
DOMESTIC ANIMAL	0	0	1	0	0	1	1	1	0	0	0	0	0	0	4	1.03
DEFECTIVE TIRES	0	0	0	0	1	0	1	0	0	1	0	0	0	0	3	0.77
OTHER	1	0	1	6	1	0	4	4	16	8	4	2	0	6	66	16.96
TOTAL	3	5	9	21	15	25	67	55	63	36	26	12	5	47	389	100.00

NOTE: "OTHER" includes factors with less than 3 occurrences.

1989 MOTORCYCLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS IN PERSONAL INJURY ACCIDENTS BY MOTORCYCLE DRIVER'S AGE

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	PERCENT OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
FAILING TO YIELD RIGHT OF WAY	4	5	8	13	9	15	43	30	40	32	22	23	16	3	263	16.47
DRIVING WITHOUT DUE CARE	12	5	13	13	17	18	66	24	43	13	9	6	4	10	253	15.84
UNSAFE SPEED	4	0	5	4	23	17	46	29	20	4	4	0	0	0	156	9.77
ALCOHOL INVOLVEMENT	0	0	1	8	8	40	30	41	9	1	1	3	0	1	150	9.39
DRIVER INEXPERIENCE	16	7	11	7	6	7	31	12	16	9	5	0	0	1	128	8.02
FOLLOWING TOO CLOSELY	0	2	5	4	3	3	15	8	11	5	1	1	1	1	60	3.76
IMPROPER TURNING	2	1	1	2	6	1	5	8	11	10	3	2	2	1	55	3.44
IMPROPER PASSING	0	1	3	1	3	3	15	11	8	0	0	0	0	0	45	2.82
IGNORING TRAFFIC CONTROL DEVICE	1	2	3	1	0	3	11	6	8	1	2	1	0	1	40	2.50
AVOIDING VEH/PED/ CYCLE	0	0	0	1	2	0	7	5	12	4	2	1	0	0	34	2.13
OBSTRUCTION/DEBRIS ON ROAD	0	0	0	0	3	3	9	5	4	5	0	3	0	0	32	2.00
CUTTING IN	0	1	2	1	1	2	3	9	4	2	2	1	1	0	29	1.82
WEATHER	0	0	0	2	1	2	11	1	6	3	0	0	0	0	26	1.63
WILD ANIMAL	0	0	0	1	1	2	0	4	19	6	2	0	0	0	26	1.63
VISIBILITY IMPAIRED	0	0	0	2	1	2	5	1	5	0	1	1	0	0	18	1.13
PAVEMENT CONDITION	0	0	0	0	0	1	3	2	5	4	0	0	1	0	16	1.00
OTHER	9	4	12	19	16	7	54	29	56	33	15	8	2	8	266	16.65
TOTAL	48	28	64	73	100	94	364	214	300	140	69	50	27	26	1,597	100.00

NOTE: "OTHER" includes factors with less than 16 occurrences.

1989 MOTORCYCLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS IN FATAL ACCIDENTS
BY MOTORCYCLE DRIVER'S AGE

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	PERCENT OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	30-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
DRIVING AT UNSAFE SPEED	0	0	0	0	0	1	3	2	1	1	0	0	0	1	9	25.71
ALCOHOL INVOLVEMENT	1	0	0	0	0	1	1	0	2	0	0	0	0	1	6	17.14
DRIVING WITHOUT DUE CARE	0	1	0	0	2	0	2	0	1	0	0	0	0	0	6	17.14
FAILING TO YIELD RIGHT OF WAY	0	0	0	0	0	0	3	0	1	0	0	0	1	0	5	14.29
ROAD/INTERSECTION DESIGN	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	5.71
PRECEEDING ACCIDENT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2.86
DRIVER INEXPERIENCE	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2.86
DRIVING ON WRONG SIDE OF ROAD	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2.86
IGNORING TRAFFIC CONTROL DEVICE	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2.86
IMPROPER PASSING	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2.86
IMPROPER TURNING	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2.86
PAVEMENT CONDITION	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2.86
TOTAL	1	1	0	1	2	2	12	5	5	2	1	0	1	2	35	100.00

1989 ALCOHOL RELATED MOTORCYCLE ACCIDENTS
VICTIMS INJURED AND KILLED BY VICTIM AGE

- VICTIMS NOT IN DRINKING DRIVER'S VEHICLE ONLY -

VICTIM AGE	DRIVER		PASSENGER		BICYLIST		PEDESTRIAN		MOTORCYCLE DRIVER		MOTORCYCLE PASSENGER		UNKNOWN/ OTHER		TOTAL VICTIMS	
	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 - 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
19	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
20	1	0	1	0	0	0	0	0	2	0	0	0	0	0	4	0
21 - 25	1	0	1	0	0	0	0	0	7	0	0	0	0	0	9	0
26 - 30	0	0	0	0	0	0	0	0	6	1	1	0	0	0	7	1
31 - 35	2	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0
36 - 40	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
41 - 45	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3	0
46 - 50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51 - 55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56 - 60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61 - 65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66 - 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71 - 75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OVER 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
TOTAL	7	0	7	0	1	0	0	0	19	1	2	0	0	0	36	1

NOTE: **PASSENGER** includes those persons "hanging on" to a vehicle.
BICYCLIST includes both drivers and passengers on a bicycle.

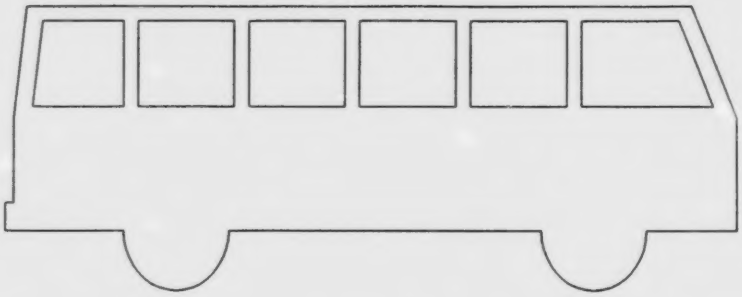
1989 ALCOHOL RELATED MOTORCYCLE ACCIDENTS
VICTIMS INJURED AND KILLED BY VICTIM AGE

- VICTIMS IN DRINKING DRIVER'S VEHICLE ONLY -

VICTIM AGE	DRIVER		PASSENGER		BICYLIST		PEDESTRIAN		MOTORCYCLE DRIVER		MOTORCYCLE PASSENGER		UNKNOWN/ OTHER		TOTAL VICTIMS	
	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD	INJ	KLD
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 - 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 15	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
18	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	0
19	1	0	0	0	0	0	1	0	5	0	1	0	0	0	8	0
20	1	0	0	0	0	0	0	0	6	1	1	0	0	0	8	1
21 - 25	0	0	1	0	0	0	1	0	32	0	4	0	1	0	39	0
26 - 30	1	0	0	0	0	0	0	0	25	0	2	0	0	0	28	0
31 - 35	0	0	1	0	0	0	0	0	24	0	3	1	0	1	28	2
36 - 40	0	0	0	0	0	0	0	0	11	1	0	0	0	0	11	1
41 - 45	1	0	0	0	0	0	0	0	4	0	2	0	0	0	7	0
46 - 50	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0
51 - 55	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
56 - 60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61 - 65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
66 - 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71 - 75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OVER 85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN	0	0	0	0	0	0	0	0	1	0	6	0	0	0	7	0
TOTAL	4	0	2	0	0	0	3	0	119	3	20	1	1	1	149	5

NOTE: **PASSENGER** includes those persons "hanging on" to a vehicle.
BICYCLIST includes both drivers and passengers on a bicycle.

SECTION 13



SCHOOL BUS ACCIDENTS

1989 ACCIDENTS - SCHOOL BUSES

A school bus is defined, for the purpose of these reports, as a motor vehicle used to convey children to or from school. Generally, these are the traditional yellow and black school buses.

A total of 211 accidents occurring in 1989 involved school buses. Forty-five accidents resulted in injuries to 84 people, 20 of whom were school bus occupants. There were no fatalities in 1989 involving school buses.

The major contributing factors to school bus accidents, assigned to school bus drivers, were: backing unsafely; driving without due care; weather conditions and failing to yield right-of-way.

1989 SCHOOL BUS ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- ALL DRIVERS/VEHICLES INVOLVED -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	19	8	0	27	15.00
BACKING UNSAFELY	22	1	0	23	12.78
WEATHER CONDITION	15	4	0	19	10.56
FAILING TO YIELD RIGHT OF WAY	10	3	0	13	7.22
FOLLOWING TOO CLOSELY	6	2	0	8	4.44
ALCOHOL INVOLVEMENT	5	2	0	7	3.89
DRIVING AT UNSAFE SPEED	3	4	0	7	3.89
DRIVER INEXPERIENCE	5	1	0	6	3.33
IMPROPER TURNING	5	1	0	6	3.33
IMPROPER PASSING	4	1	0	5	2.78
IGNORING TRAFFIC CONTROL DEVICE	4	1	0	5	2.78
DRIVING ON WRONG SIDE OF ROAD	2	2	0	4	2.22
DEFECTIVE BRAKES	3	1	0	4	2.22
CUTTING IN	1	1	0	2	1.11
DRIVERLESS VEHICLE	2	0	0	2	1.11
SUNLIGHT GLARE	2	0	0	2	1.11
VISIBILITY IMPAIRED	0	2	0	2	1.11
PEDESTRIAN ERROR/CONFUSION	0	1	0	1	0.56
AVOID VEH/PED/CYCLE	0	1	0	1	0.56
OVERSIZE VEHICLE	1	0	0	1	0.56
DEFECTIVE STEERING	1	0	0	1	0.56
OBSTRUCTION/DEBRIS ON ROAD	0	1	0	1	0.56
ROAD MAINTENANCE/ CONSTRUCTION	1	0	0	1	0.56
WILD ANIMAL	1	0	0	1	0.56
INSUFFICIENT TRAFFIC CONTROL	1	0	0	1	0.56
ROAD/INTERSECTION DESIGN	1	0	0	1	0.56
ROADSIDE HAZARD	1	0	0	1	0.56
OTHER	21	7	0	28	15.56
TOTAL	136	44	0	180	100.00

1989 SCHOOL BUS ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- SCHOOL BUS DRIVERS/VEHICLES ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BACKING UNSAFELY	17	0	0	17	17.00
DRIVING WITHOUT DUE CARE	11	3	0	14	14.00
WEATHER CONDITION	7	2	0	9	9.00
FAILING TO YIELD RIGHT OF WAY	5	2	0	7	7.00
DRIVING AT UNSAFE SPEED	2	3	0	5	5.00
DEFECTIVE BRAKES	3	1	0	4	4.00
FOLLOWING TOO CLOSELY	2	2	0	4	4.00
DRIVER INEXPERIENCE	3	0	0	3	3.00
IMPROPER TURNING	3	0	0	3	3.00
DRIVING ON WRONG SIDE OF ROAD	1	1	0	2	2.00
IGNORING TRAFFIC CONTROL DEVICE	2	0	0	2	2.00
DRIVERLESS VEHICLE	2	0	0	2	2.00
VISIBILITY IMPAIRED	0	2	0	2	2.00
ALCOHOL INVOLVEMENT	1	0	0	1	1.00
IMPROPER PASSING	1	0	0	1	1.00
INSUFFICIENT TRAFFIC CONTROL	1	0	0	1	1.00
OBSTRUCTION/DEBRIS ON ROAD	0	1	0	1	1.00
OVERSIZE VEHICLE	1	0	0	1	1.00
ROAD/INTERSECTION DESIGN	1	0	0	1	1.00
ROADSIDE HAZARD	1	0	0	1	1.00
SUNLIGHT GLARE	1	0	0	1	1.00
WILD ANIMAL	1	0	0	1	1.00
OTHER	13	4	0	17	17.00
TOTAL	79	21	0	100	100.00

1989 SCHOOL BUS ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- OTHER DRIVERS/VEHICLES ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	8	5	0	13	16.25
WEATHER CONDITION	8	2	0	10	12.50
ALCOHOL INVOLVEMENT	4	2	0	6	7.50
BACKING UNSAFELY	5	1	0	6	7.50
FAILING TO YIELD RIGHT OF WAY	5	1	0	6	7.50
FOLLOWING TOO CLOSELY	4	0	0	4	5.00
IMPROPER PASSING	3	1	0	4	5.00
DRIVER INEXPERIENCE	2	1	0	3	3.75
IGNORING TRAFFIC CONTROL DEVICE	2	1	0	3	3.75
IMPROPER TURNING	2	1	0	3	3.75
CUTTING IN	1	1	0	2	2.50
DRIVING ON WRONG SIDE OF ROAD	1	1	0	2	2.50
DRIVING AT UNSAFE SPEED	1	1	0	2	2.50
AVOID VEH/PED/CYCLE	0	1	0	1	1.25
DEFECTIVE STEERING	1	0	0	1	1.25
PEDESTRIAN ERROR/CONFUSION	0	1	0	1	1.25
ROAD MAINTENANCE/ CONSTRUCTION	1	0	0	1	1.25
SUNLIGHT GLARE	1	0	0	1	1.25
OTHER	8	3	0	11	13.75
TOTAL	57	23	0	80	100.00

MAJOR CONTRIBUTING FACTORS IN SCHOOL BUS ACCIDENTS

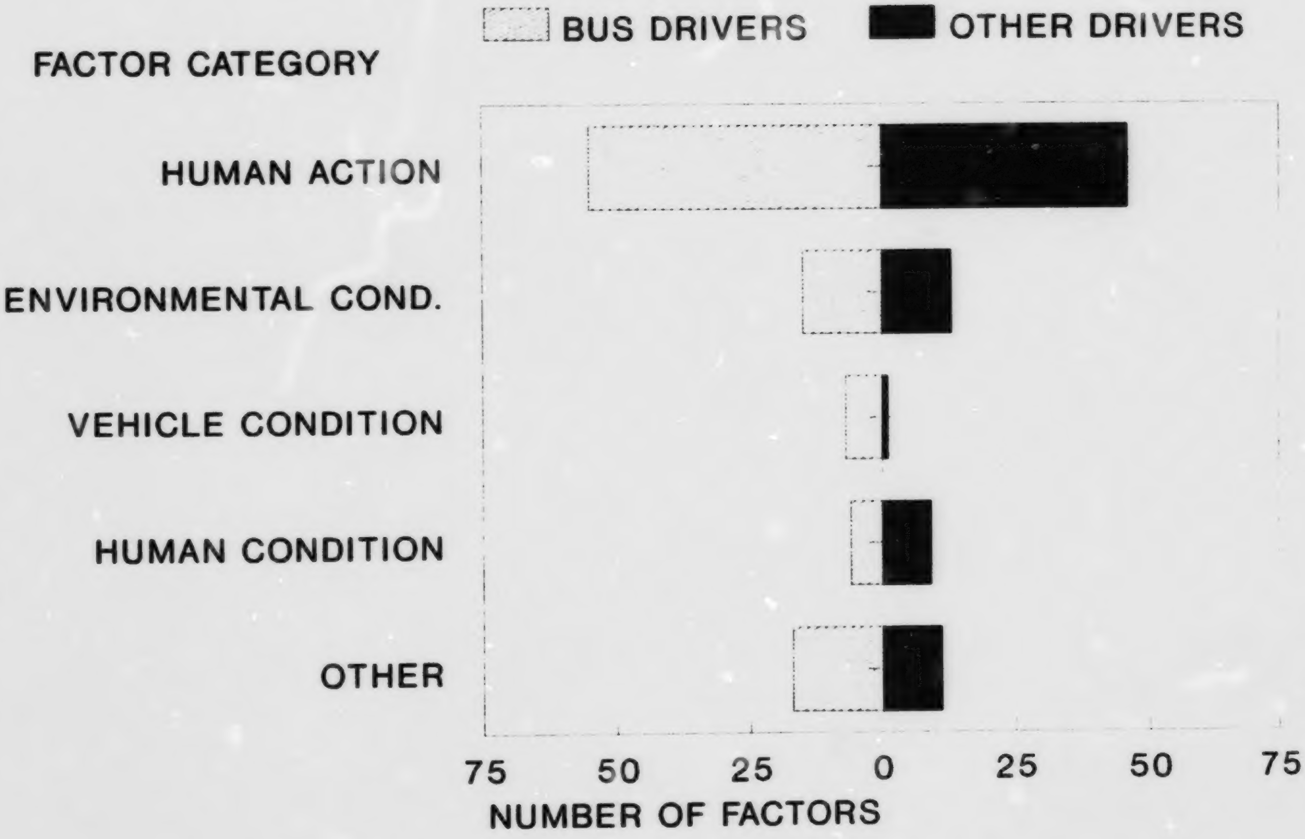


fig. 35

1989 SCHOOL BUS ACCIDENTS

PRIMARY ACCIDENT OCCURRENCE BY ACCIDENT TYPE

PRIMARY ACCIDENT OCCURRENCE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
REAR END	32	12	0	44	20.85
SIDE SWIPE	25	2	0	27	12.80
BACKING UP	26	0	0	26	12.32
RIGHT ANGLE COLLISION	20	5	0	25	11.85
HEAD ON	4	5	0	9	4.27
OVERTAKING	5	3	0	8	3.79
OFF ROAD - RIGHT	4	2	0	6	2.84
LEFT TURN - ACROSS ONCOMING TRAFFIC	3	1	0	4	1.90
RIGHT TURN - SAME DIRECTION	3	0	0	3	1.42
RIGHT TURN - HEAD ON	2	0	0	2	0.95
RIGHT TURN - OPPOSITE DIRECTION	2	0	0	2	0.95
LEFT TURN - HEAD ON	0	1	0	1	0.47
LEFT TURN - ONE WAY	1	0	0	1	0.47
OFF ROAD - LEFT	0	1	0	1	0.47
RIGHT TURN - REAR END	1	0	0	1	0.47
OTHER	24	12	0	36	17.06
UNKNOWN	14	1	0	15	7.11
TOTAL	166	45	0	211	100.00

NOTE: The primary accident occurrence categories were modified for 1987 data, therefore comparison between 1987 and prior years is not recommended.

1989 SCHOOL BUS ACCIDENTS

PRE-COLLISION ACTION BY ACCIDENT TYPE

PRE-COLLISION ACTION	ACCIDENT TYPE			TOTAL ACTIONS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
GOING STRAIGHT AHEAD	112	45	0	157	36.94
PARKED LEGALLY	44	4	0	48	11.29
STOPPED IN TRAFFIC	33	7	0	40	9.41
BACKING	34	2	0	36	8.47
MAKING RIGHT TURN	28	2	0	30	7.06
MAKING LEFT TURN	17	6	0	23	5.41
SLOWING OR STOPPING	15	5	0	20	4.71
SKIDDING	12	6	0	18	4.24
CHANGING LANES	5	2	0	7	1.65
OVERTAKING	4	1	0	5	1.18
STARTING FROM PARKED POSITION	4	1	0	5	1.18
PARKED ILLEGALLY	4	0	0	4	0.94
STARTING IN TRAFFIC	2	1	0	3	0.71
MERGING	1	1	0	2	0.47
SWERVING	1	1	0	2	0.47
ENTERING PARKED POSITION	1	0	0	1	0.24
MAKING U-TURN	1	0	0	1	0.24
NOT APPLICABLE	0	5	0	5	1.18
OTHER	7	0	0	7	1.65
UNKNOWN	8	3	0	11	2.59
TOTAL	333	92	0	425	100.00

NOTE: This table represents the pre-collision actions of all vehicles involved.

1989 SCHOOL BUS ACCIDENTS

ACCIDENT LOCATION BY ACCIDENT TYPE

ACCIDENT LOCATION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BETWEEN INTERSECTIONS	65	21	0	86	40.76
AT INTERSECTION	58	18	0	76	36.02
PARKING LOT	18	0	0	18	8.53
ROAD/DRIVEWAY INTERSECTION	12	5	0	17	8.06
BRIDGE	1	1	0	2	0.95
ENTRANCE RAMP	1	0	0	1	0.47
OFF HIGHWAY	1	0	0	1	0.47
RAILROAD CROSSING	1	0	0	1	0.47
OTHER	4	0	0	4	1.90
UNKNOWN	5	0	0	5	2.37
TOTAL	166	45	0	211	100.00

1989 SCHOOL BUS ACCIDENTS

ROADWAY SURFACE CONDITION BY ACCIDENT TYPE

SURFACE CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRY	78	22	0	100	47.39
WET	49	13	0	62	29.38
ICY	19	3	0	22	10.43
SNOW	17	3	0	20	9.48
SLUSH	1	3	0	4	1.90
MUDDY	0	1	0	1	0.47
UNKNOWN	2	0	0	2	0.95
TOTAL	166	45	0	211	100.00

1989 SCHOOL BUS ACCIDENTS

LIGHTING CONDITION BY ACCIDENT TYPE

LIGHTING CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DAYLIGHT	138	42	0	180	85.57
DARK/SOME ILLUMINATION	9	0	0	9	4.27
DARK/FULL ILLUMINATION	7	1	0	8	3.79
DARK/NO ILLUMINATION	3	1	0	4	1.90
DAWN	3	1	0	4	1.90
DUSK	3	0	0	3	1.42
UNKNOWN	3	0	0	3	1.42
TOTAL	166	45	0	211	100.00

1989 SCHOOL BUS ACCIDENTS

WEATHER CONDITION BY ACCIDENT TYPE

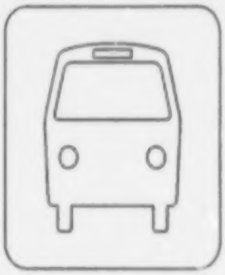
WEATHER CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
CLEAR	70	14	0	84	39.81
RAIN	50	16	0	66	31.28
CLOUDY	25	9	0	34	16.11
SNOW/SLEET	19	5	0	24	11.37
FOG	0	1	0	1	0.47
UNKNOWN	2	0	0	2	0.95
TOTAL	166	45	0	211	100.00

1989 SCHOOL BUS ACCIDENTS

ACCIDENT HOUR BY ACCIDENT TYPE

ACCIDENT HOUR	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
Mid. - 1 am	0	1	0	1	0.47
1 am - 2 am	0	0	0	0	0.00
2 am - 3 am	2	0	0	2	0.95
3 am - 4 am	0	0	0	0	0.00
4 am - 5 am	0	0	0	0	0.00
5 am - 6 am	0	0	0	0	0.00
6 am - 7 am	2	1	0	3	1.42
7 am - 8 am	16	4	0	20	9.48
8 am - 9 am	16	5	0	21	9.95
9 am - 10 am	14	1	0	15	7.11
10 am - 11 am	10	2	0	12	5.69
11 am - Noon	5	2	0	7	3.32
Noon - 1 pm	9	2	0	11	5.21
1 pm - 2 pm	10	4	0	14	6.64
2 pm - 3 pm	14	3	0	17	8.06
3 pm - 4 pm	28	10	0	38	18.01
4 pm - 5 pm	13	4	0	17	8.06
5 pm - 6 pm	10	2	0	12	5.69
6 pm - 7 pm	2	2	0	4	1.90
7 pm - 8 pm	4	0	0	4	1.90
8 pm - 9 pm	2	0	0	2	0.95
9 pm - 10 pm	2	0	0	2	0.95
10 pm - 11 pm	1	0	0	1	0.47
11 pm - Mid.	1	1	0	2	0.95
UNKNOWN	5	1	0	6	2.84
TOTAL	166	45	0	211	100.00

SECTION 14



PUBLIC BUS ACCIDENTS

1989 ACCIDENTS - PUBLIC BUSES

For the purpose of this report, a public bus is defined as a motor vehicle designed to carry more than ten persons. This category excludes school buses, but does include buses chartered for school activities.

A total of 562 accidents involving public buses occurred in 1989. There were 214 persons injured and 5 people killed in 128 casualty-producing accidents. Of the 214 people injured, 70 were occupants.

The major contributing factors to public bus accidents, assigned to the bus drivers, were: driving without due care; failing to yield the right-of-way; following too closely and weather conditions.

1989 PUBLIC BUS ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- ALL DRIVERS/VEHICLES INVOLVED -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	29	23	0	52	14.21
FAILING TO YIELD RIGHT OF WAY	27	7	0	34	9.29
FOLLOWING TOO CLOSELY	16	15	0	31	8.47
WEATHER CONDITION	19	9	0	28	7.65
CUTTING IN	19	3	0	22	6.01
DRIVING AT UNSAFE SPEED	12	8	0	20	5.46
ALCOHOL INVOLVEMENT	7	9	1	17	4.64
IGNORING TRAFFIC CONTROL DEVICE	10	6	0	16	4.37
BACKING UNSAFELY	8	2	0	10	2.73
IMPROPER PASSING	9	1	0	10	2.73
DRIVER INEXPERIENCE	7	1	0	8	2.19
IMPROPER TURNING	7	0	0	7	1.91
AVOIDING VEH/PED/CYCLE	4	2	0	6	1.64
PEDESTRIAN ERROR/CONFUSION	0	5	0	5	1.37
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	2	2	0	4	1.09
DRIVING ON WRONG SIDE OF ROAD	1	2	1	4	1.09
DRIVERLESS VEHICLE	2	1	0	3	0.82
PAVEMENT CONDITION	0	3	0	3	0.82
WILD ANIMAL	3	0	0	3	0.82
DEFECTIVE BRAKES	0	2	0	2	0.55
DEFECTIVE TIRES	2	0	0	2	0.55
FAILING TO SIGNAL	2	0	0	2	0.55
DEFECTIVE STEERING	1	0	0	1	0.27
DOMESTIC ANIMAL	1	0	0	1	0.27
FELL ASLEEP	0	1	0	1	0.27
OBSTRUCTION/DEBRIS ON ROAD	1	0	0	1	0.27
OVERSIZE VEHICLE	1	0	0	1	0.27
PHYSICAL DISABILITY	0	1	0	1	0.27
ROAD MAINTENANCE/ CONSTRUCTION	1	0	0	1	0.27
VISIBILITY IMPAIRED	1	0	0	1	0.27
OTHER	46	23	0	69	18.85
TOTAL	238	126	2	366	100.00

1989 PUBLIC BUS ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- PUBLIC BUS DRIVERS/VEHICLES ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
FAILING TO YIELD RIGHT OF WAY	9	3	0	12	9.09
FOLLOWING TOO CLOSELY	1	9	0	10	7.58
WEATHER CONDITION	7	3	0	10	7.58
CUTTING IN	8	1	0	9	6.82
DRIVING WITHOUT DUE CARE	6	3	0	9	6.82
BACKING UNSAFELY	6	1	0	7	5.30
IMPROPER TURNING	6	0	0	6	4.55
IMPROPER PASSING	3	1	0	4	3.03
DRIVING AT UNSAFE SPEED	3	1	0	4	3.03
AVOIDING VEH/PED/CYCLE	2	1	0	3	2.27
WILD ANIMAL	3	0	0	3	2.27
IGNORING TRAFFIC CONTROL DEVICE	1	1	0	2	1.52
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	0	1	0	1	0.76
ALCOHOL INVOLVEMENT	1	0	0	1	0.76
DEFECTIVE BRAKES	0	1	0	1	0.76
DEFECTIVE STEERING	1	0	0	1	0.76
DEFECTIVE TIRES	1	0	0	1	0.76
FAILING TO SIGNAL	1	0	0	1	0.76
DRIVERLESS VEHICLE	0	1	0	1	0.76
OVERSIZE VEHICLE	1	0	0	1	0.76
PAVEMENT CONDITION	0	1	0	1	0.76
PEDESTRIAN ERROR/CONFUSION	0	1	0	1	0.76
ROAD MAINTENANCE/ CONSTRUCTION	1	0	0	1	0.76
VISIBILITY IMPAIRED	1	0	0	1	0.76
OTHER	27	14	0	41	31.06
TOTAL	89	43	0	132	100.00

1989 PUBLIC BUS ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- OTHER DRIVERS/VEHICLES ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	23	20	0	43	18.38
FAILING TO YIELD RIGHT OF WAY	18	4	0	22	9.40
FOLLOWING TOO CLOSELY	15	6	0	21	8.97
WEATHER CONDITION	12	6	0	18	7.69
ALCOHOL INVOLVEMENT	6	9	1	16	6.84
DRIVING AT UNSAFE SPEED	9	7	0	16	6.84
IGNORING TRAFFIC CONTROL DEVICE	9	5	0	14	5.98
CUTTING IN	11	2	0	13	5.56
DRIVER INEXPERIENCE	7	1	0	8	3.42
IMPROPER PASSING	6	0	0	6	2.56
DRIVING ON WRONG SIDE OF ROAD	1	2	1	4	1.71
PEDESTRIAN ERROR/CONFUSION	0	4	0	4	1.71
(RESULT OF) PRECEDING ACCIDENT	2	1	0	3	1.28
AVOIDING VEH/PED/CYCLE	2	1	0	3	1.28
BACKING UNSAFELY	2	1	0	3	1.28
DRIVERLESS VEHICLE	2	0	0	2	0.85
PAVEMENT CONDITION	0	2	0	2	0.85
DEFECTIVE BRAKES	0	1	0	1	0.43
DEFECTIVE TIRES	1	0	0	1	0.43
DOMESTIC ANIMAL	1	0	0	1	0.43
FAILING TO SIGNAL	1	0	0	1	0.43
FELL ASLEEP	0	1	0	1	0.43
IMPROPER TURNING	1	0	0	1	0.43
OBSTRUCTION/DEBRIS ON ROAD	1	0	0	1	0.43
PHYSICAL DISABILITY	0	1	0	1	0.43
OTHER	19	9	0	28	11.97
TOTAL	149	83	2	234	100.00

MAJOR CONTRIBUTING FACTORS
IN PUBLIC BUS ACCIDENTS

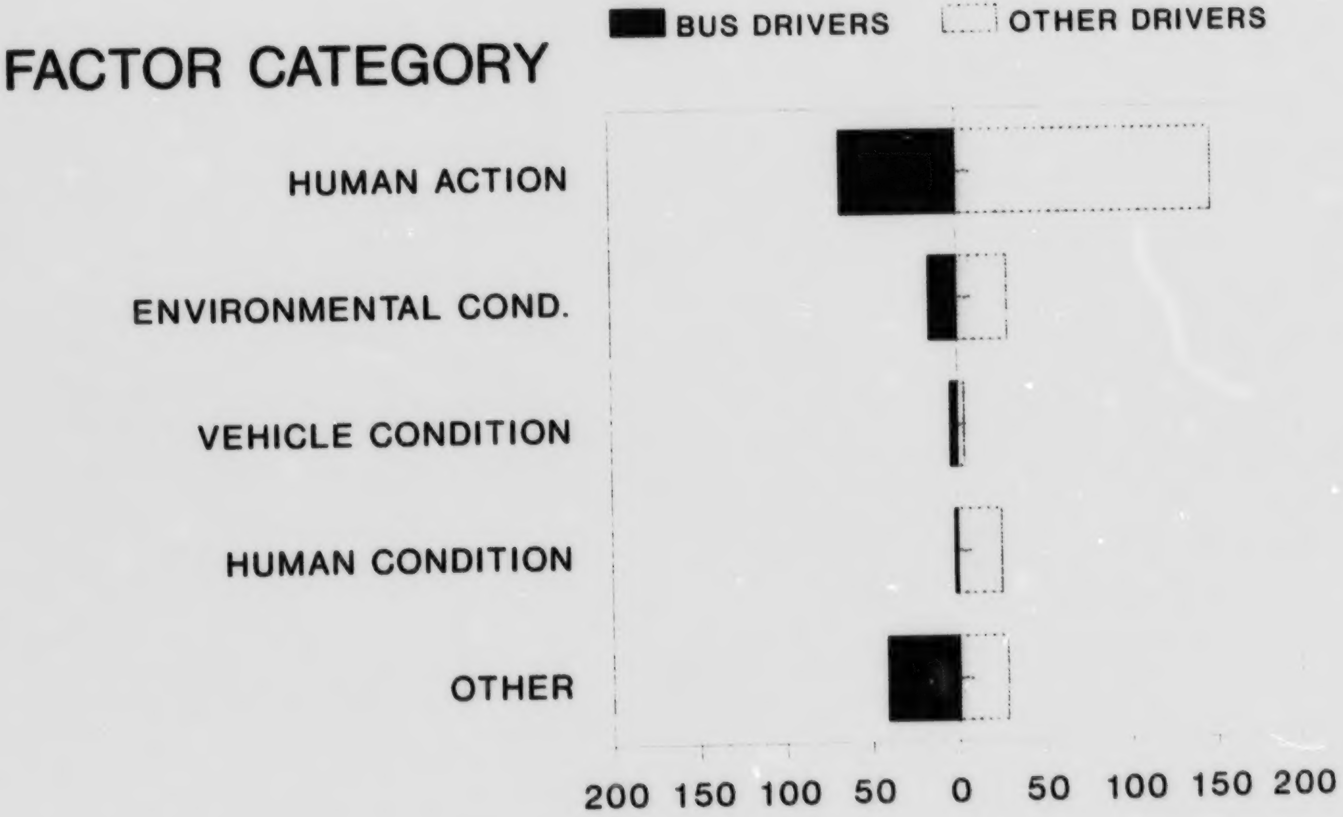


fig. 36

1989 PUBLIC BUS ACCIDENTS

PRIMARY ACCIDENT OCCURRENCE BY ACCIDENT TYPE

PRIMARY ACCIDENT OCCURRENCE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
REAR END	78	40	0	118	21.00
RIGHT ANGLE COLLISION	39	24	0	63	11.21
OVERTAKING	41	6	0	47	8.36
SIDE SWIPE	39	6	0	45	8.01
BACKING UP	11	2	0	13	2.31
LEFT TURN - ACROSS ONCOMING TRAFFIC	9	3	0	12	2.14
RIGHT TURN - REAR END	9	2	0	11	1.96
HEAD ON	2	3	3	8	1.42
OFF ROAD - RIGHT	5	3	0	8	1.42
LEFT TURN - HEAD ON	5	1	1	7	1.25
LEFT TURN - ONE WAY	5	0	0	5	0.89
ONE WAY STREET	3	0	0	3	0.53
OFF ROAD - LEFT	2	0	0	2	0.36
OTHER	138	27	0	165	29.36
UNKNOWN	44	11	0	55	9.79
TOTAL	430	128	4	562	100.00

NOTE: The primary accident occurrence categories were modified for 1987 data, therefore comparison between 1987 and prior years is not recommended.

1989 PUBLIC BUS ACCIDENTS

PRE-COLLISION ACTION BY ACCIDENT TYPE

PRE-COLLISION ACTION	ACCIDENT TYPE			TOTAL ACTIONS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
GOING STRAIGHT AHEAD	314	131	9	454	38.28
STOPPED IN TRAFFIC	103	37	0	140	11.80
MAKING RIGHT TURN	85	9	0	94	7.93
PARKED LEGALLY	75	13	0	88	7.42
CHANGING LANES	76	5	0	81	6.83
MAKING LEFT TURN	57	8	1	66	5.56
SLOWING OR STOPPING	35	31	0	66	5.56
BACKING	21	5	0	26	2.19
SKIDDING	20	3	0	23	1.94
STARTING FROM PARKED POSITION	15	3	0	18	1.52
OVERTAKING	10	3	0	13	1.10
STARTING IN TRAFFIC	10	2	0	12	1.01
PARKED ILLEGALLY	11	0	0	11	0.93
SWERVING	8	2	0	10	0.84
ENTERING PARKED POSITION	7	2	0	9	0.76
MERGING	5	1	0	6	0.51
AVOIDING OBJECT ON ROAD	2	0	0	2	0.17
JACK-KNIFING	1	0	0	1	0.08
MAKING U-TURN	0	1	0	1	0.08
NOT APPLICABLE	0	25	0	25	2.11
OTHER	7	2	0	9	0.76
UNKNOWN	26	5	0	31	2.61
TOTAL	888	288	10	1,186	100.00

NOTE: This table represents the pre-collision actions of all vehicles involved

1989 PUBLIC BUS ACCIDENTS

ACCIDENT LOCATION BY ACCIDENT TYPE

ACCIDENT LOCATION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BETWEEN INTERSECTIONS	199	54	2	255	45.37
AT INTERSECTION	178	58	0	236	41.99
ROAD/DRIVEWAY INTERSECTION	21	4	1	26	4.63
PARKING LOT	11	3	0	14	2.49
BRIDGE	6	2	1	9	1.60
ENTRANCE RAMP	2	0	0	2	0.36
TRANSIT EXPRESS LANE	2	0	0	2	0.36
TUNNEL	0	2	0	2	0.36
EXIT DECELERATION LANE	0	1	0	1	0.18
EXIT INTERSECTION	1	0	0	1	0.18
EXIT RAMP	1	0	0	1	0.18
OFF HIGHWAY	1	0	0	1	0.18
RAILROAD CROSSING	1	0	0	1	0.18
OTHER	1	1	0	2	0.36
UNKNOWN	6	3	0	9	1.60
TOTAL	430	128	4	562	100.00

1989 PUBLIC BUS ACCIDENTS

ROADWAY SURFACE CONDITION BY ACCIDENT TYPE

SURFACE CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRY	274	84	2	360	64.06
WET	119	38	2	159	28.29
SNOW	18	1	0	19	3.38
ICY	12	4	0	16	2.85
SLUSH	2	0	0	2	0.36
UNKNOWN	5	1	0	6	1.07
TOTAL	430	128	4	562	100.00

1989 PUBLIC BUS ACCIDENTS

LIGHTING CONDITION BY ACCIDENT TYPE

LIGHTING CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DAYLIGHT	313	100	3	416	74.02
DARK/FULL ILLUMINATION	58	9	0	67	11.92
DARK/SOME ILLUMINATION	34	11	1	46	8.19
DUSK	11	4	0	15	2.67
DARK/NO ILLUMINATION	7	2	0	9	1.60
DAWN	1	0	0	1	0.18
UNKNOWN	6	2	0	8	1.42
TOTAL	430	128	4	562	100.00

1989 PUBLIC BUS ACCIDENTS

ACCIDENT TYPE BY WEATHER CONDITION

WEATHER CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
CLEAR	215	64	2	281	50.00
CLOUDY	112	31	1	144	25.62
RAINING	71	30	1	102	18.15
SNOW/SLEET	20	1	0	21	3.74
FOG	3	0	0	3	0.53
STRONG WIND	1	0	0	1	0.18
OTHER	1	0	0	1	0.18
UNKNOWN	7	2	0	9	1.60
TOTAL	430	128	4	562	100.00

1989 PUBLIC BUS ACCIDENTS

ACCIDENT HOUR BY ACCIDENT TYPE

ACCIDENT HOUR	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
Mid. - 1 am	8	3	0	11	1.96
1 am - 2 am	4	1	0	5	0.89
2 am - 3 am	0	0	0	0	0.00
3 am - 4 am	1	1	0	2	0.36
4 am - 5 am	0	0	0	0	0.00
5 am - 6 am	1	0	0	1	0.18
6 am - 7 am	7	3	0	10	1.78
7 am - 8 am	21	9	0	30	5.34
8 am - 9 am	32	8	0	40	7.12
9 am - 10 am	16	8	0	24	4.27
10 am - 11 am	19	4	0	23	4.09
11 am - Noon	21	8	0	29	5.16
Noon - 1 pm	27	5	1	33	5.87
1 pm - 2 pm	22	11	0	33	5.87
2 pm - 3 pm	32	9	0	41	7.30
3 pm - 4 pm	36	11	2	49	8.72
4 pm - 5 pm	41	13	0	54	9.61
5 pm - 6 pm	37	7	0	44	7.83
6 pm - 7 pm	19	9	0	28	4.98
7 pm - 8 pm	13	3	0	16	2.85
8 pm - 9 pm	23	3	0	26	4.63
9 pm - 10 pm	12	2	0	14	2.49
10 pm - 11 pm	13	4	0	17	3.02
11 pm - Mid.	15	2	1	18	3.20
UNKNOWN	10	4	0	14	2.49
TOTAL	430	128	4	562	100.00

SECTION 15

COMMERCIAL VEHICLES

1989 ACCIDENTS - COMMERCIAL VEHICLES

As presented in this report, a commercial vehicle is defined as any motor vehicle or trailer licenced for commercial purposes. Vehicles in this category range from taxis to combination truck units to tractor-trailer rigs. During 1989, there were 620,301 commercial vehicles licenced in British Columbia. This is an increase of 3% from the previous year.

Commercial vehicles involved in traffic accidents totalled 22,907 in 1989, an increase of 14%. Seventy-six percent of these vehicles were involved in property damage accidents, 23% in accidents involving personal injury, and 1% were involved in fatal accidents.

The greatest number of commercial vehicle accidents occurred in the month of November.

1989 COMMERCIAL VEHICLE ACCIDENTS MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- ALL DRIVERS/VEHICLES INVOLVED -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	1,726	930	18	2,674	14.48
FAILING TO YIELD RIGHT OF WAY	1,350	700	11	2,061	11.16
FOLLOWING TOO CLOSELY	921	609	0	1,530	8.28
BACKING UNSAFELY	1,446	54	2	1,502	8.13
WEATHER CONDITION	919	343	7	1,269	6.87
DRIVING AT UNSAFE SPEED	684	499	19	1,202	6.51
WILD ANIMAL	628	46	1	675	3.65
ALCOHOL INVOLVEMENT	328	284	7	619	3.35
IGNORING TRAFFIC CONTROL DEVICE	247	222	3	472	2.56
IMPROPER TURNING	394	72	0	466	2.52
CUTTING IN	383	81	0	464	2.51
DRIVER INEXPERIENCE	314	109	2	425	2.30
IMPROPER PASSING	242	68	4	314	1.70
VISIBILITY IMPAIRED	184	73	0	257	1.39
DRIVING ON WRONG SIDE	155	86	10	251	1.36
AVOIDING VEH/PED/CYCLE	161	81	0	242	1.31
ROAD MAINTENANCE/ CONSTRUCTION	145	34	1	180	0.97
DEFECTIVE BRAKES	101	70	4	175	0.95
INSECURE LOAD	112	33	0	145	0.79
OBSTRUCTION/DEBRIS ON ROAD	94	31	1	126	0.68
DOMESTIC ANIMAL	76	16	0	92	0.50
OVERSIZE VEHICLE	79	6	3	88	0.48
PAVEMENT CONDITION	59	22	2	83	0.45
FAILING TO SIGNAL	54	23	0	77	0.42
DEFECTIVE TIRES	48	20	1	69	0.37
ROAD/INTERSECTION DESIGN	53	15	0	68	0.37
DRIVERLESS VEHICLE	56	5	0	61	0.33
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	35	21	4	60	0.32
FELL ASLEEP	27	28	3	58	0.31
DEFECTIVE TOW HITCH	43	7	0	50	0.27
SUNLIGHT GLARE	41	6	0	47	0.25
PEDESTRIAN ERROR/CONFUSION	2	37	2	41	0.22
EXTREME FATIGUE	19	18	1	38	0.21
ROADSIDE HAZARD	29	5	0	34	0.18
DEFECTIVE ENGINE	23	9	0	32	0.17
DEFECTIVE STEERING	22	8	0	30	0.16
INSUFFICIENT TRAFFIC CONTROL	21	9	0	30	0.16
OTHER	1,775	677	12	2,464	13.34
TOTAL	12,996	5,357	118	18,471	100.00

NOTE: "OTHER" includes those factors with less than 30 occurrences.

1989 COMMERCIAL VEHICLE ACCIDENTS
MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- COMMERCIAL DRIVERS/VEHICLES ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	1,152	555	10	1,717	14.02
BACKING UNSAFELY	1,269	47	2	1,318	10.76
FAILING TO YIELD RIGHT OF WAY	708	363	9	1,080	8.82
FOLLOWING TOO CLOSELY	524	376	0	900	7.35
WEATHER CONDITION	621	233	3	857	7.00
DRIVING AT UNSAFE SPEED	492	328	10	830	6.78
WILD ANIMAL	626	46	1	673	5.50
IMPROPER TURNING	291	41	0	332	2.71
ALCOHOL INVOLVEMENT	180	139	3	322	2.63
CUTTING IN	238	38	0	276	2.25
DRIVER INEXPERIENCE	196	59	1	256	2.09
IGNORING TRAFFIC CONTROL DEVICE	117	117	0	234	1.91
VISIBILITY IMPAIRED	129	43	0	172	1.40
AVOIDING VEH/PED/CYCLIST	117	49	0	166	1.36
DEFECTIVE BRAKES	83	58	4	145	1.18
IMPROPER PASSING	105	35	2	142	1.16
DRIVING ON WRONG SIDE	95	40	3	138	1.13
INSECURE LOAD	105	32	0	137	1.12
ROAD MAINTENANCE/ CONSTRUCTION	121	22	0	134	1.09
OBSTRUCTION/DEBRIS ON ROAD	72	22	1	95	0.78
OVERSIZE VEHICLE	79	5	3	87	0.71
DOMESTIC ANIMAL	75	10	0	85	0.69
PAVEMENT CONDITION	49	17	1	67	0.55
DEFECTIVE TIRES	47	15	0	62	0.51
ROAD/INTERSECTION DESIGN	41	13	0	54	0.44
FAILING TO SIGNAL	42	11	0	53	0.43
FELL ASLEEP	23	24	2	49	0.40
DEFECTIVE TOW HITCH	41	5	0	46	0.38
DRIVERLESS VEHICLE	39	4	0	43	0.35
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	23	10	1	34	0.28
EXTREME FATIGUE	15	14	0	29	0.24
ROADSIDE HAZARD	25	4	0	29	0.24
SUNLIGHT GLARE	23	4	0	27	0.22
DEFECTIVE STEERING	19	7	0	26	0.21
DEFECTIVE SUSPENSION	18	4	1	23	0.19
INSUFFICIENT TRAFFIC CONTROL	17	5	0	22	0.18
DEFECTIVE ENGINE	17	3	0	20	0.16
OTHER	1,187	376	2	1,565	12.78
TOTAL	9,012	3,174	59	12,245	100.00

NOTE: "OTHER" includes those factors with less than 20 occurrences.

1989 COMMERCIAL VEHICLE ACCIDENTS
MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE

- OTHER DRIVERS/VEHICLES ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
FAILING TO YIELD RIGHT OF WAY	642	337	2	981	15.76
DRIVING WITHOUT DUE CARE	574	375	8	957	15.37
FOLLOWING TOO CLOSELY	397	233	0	630	10.12
WEATHER CONDITION	298	110	4	412	6.62
DRIVING AT UNSAFE SPEED	192	171	9	372	5.97
ALCOHOL INVOLVEMENT	148	145	4	297	4.77
IGNORING TRAFFIC CONTROL DEVICE	130	105	3	238	3.82
CUTTING IN	145	43	0	188	3.02
BACKING UNSAFELY	177	7	0	184	2.96
IMPROPER PASSING	137	33	2	172	2.76
DRIVER INEXPERIENCE	118	50	1	169	2.71
IMPROPER TURNING	103	31	0	134	2.15
DRIVING ON WRONG SIDE	60	46	7	113	1.81
VISIBILITY IMPAIRED	55	30	0	85	1.37
AVOIDING VEH/PED/CYCLIST	44	32	0	76	1.22
ROAD MAINTENANCE/ CONSTRUCTION	33	12	1	46	0.74
PEDESTRIAN ERROR/CONFUSION	1	32	2	35	0.56
OBSTRUCTION/DEBRIS ON ROAD	22	9	0	31	0.50
DEFECTIVE BRAKES	18	12	0	30	0.48
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	12	11	3	26	0.42
FAILING TO SIGNAL	12	12	0	24	0.39
SUNLIGHT GLARE	18	2	0	20	0.32
DRIVERLESS VEHICLE	17	1	0	18	0.29
PAVEMENT CONDITION	10	5	1	16	0.26
ROAD/INTERSECTION DESIGN	12	2	0	14	0.22
DEFECTIVE ENGINE	6	6	0	12	0.19
EXTREME FATIGUE	4	4	1	9	0.14
FELL ASLEEP	4	4	1	9	0.14
ILLNESS	2	6	0	8	0.13
INSECURE LOAD	7	1	0	8	0.13
INSUFFICIENT TRAFFIC CONTROL	4	4	0	8	0.13
DEFECTIVE TIRES	1	5	1	7	0.11
DOMESTIC ANIMAL	1	6	0	7	0.11
DEFECTIVE HEADLIGHTS	2	4	0	6	0.10
ROADSIDE HAZARD	4	1	0	5	0.08
SUICIDE ATTEMPT	0	1	4	5	0.08
ARTIFICIAL GLARE	2	2	0	4	0.06
OTHER	572	293	5	870	13.97
TOTAL	3,984	2,183	59	6,226	100.00

NOTE: "OTHER" includes those factors with less than 4 occurrences.

MAJOR CONTRIBUTING FACTORS IN COMMERCIAL VEHICLE ACCIDENTS

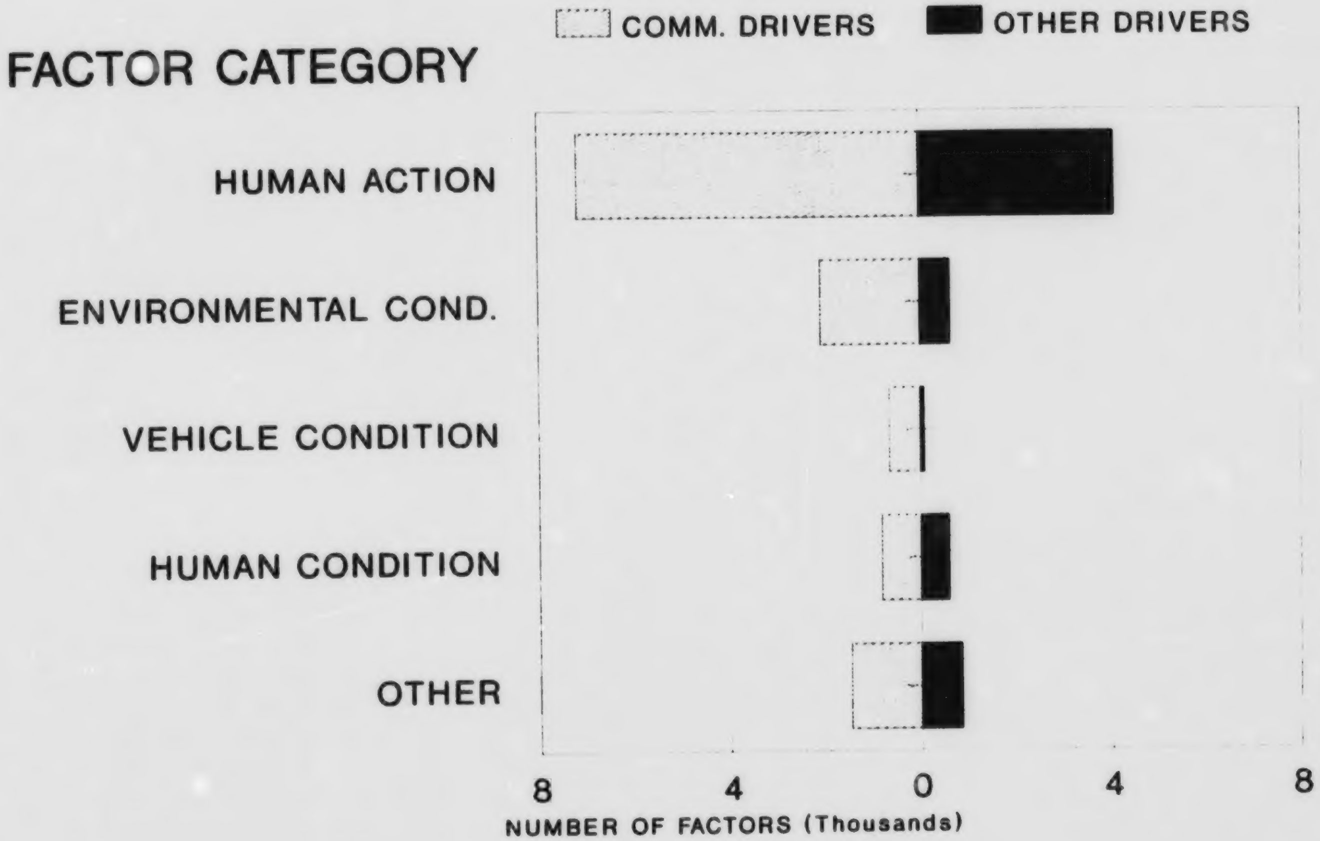


fig. 37

1989 COMMERCIAL VEHICLE ACCIDENTS

NUMBER OF COMMERCIAL VEHICLES INVOLVED IN ACCIDENTS BY MONTH

MONTH	NUMBER OF VEHICLES	PERCENT OF TOTAL
JANUARY	2,169	9.47
FEBRUARY	1,895	8.27
MARCH	1,979	8.64
APRIL	1,476	6.44
MAY	1,737	7.58
JUNE	1,907	8.32
JULY	1,732	7.56
AUGUST	1,766	7.71
SEPTEMBER	1,711	7.47
OCTOBER	2,105	9.19
NOVEMBER	2,316	10.11
DECEMBER	2,114	9.23
TOTAL	22,907	100.00

1989 COMMERCIAL VEHICLE ACCIDENTS

NUMBER OF VEHICLES INVOLVED IN ACCIDENTS BY VEHICLE TYPE

VEHICLE TYPE	ACCIDENT TYPE			TOTAL VEHICLES	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
SINGLE UNIT TRUCK, LIGHT	6,117	1,846	32	7,995	34.90
PASSENGER CAR	4,983	1,817	8	6,808	29.72
*SINGLE UNIT TRUCK, HEAVY	1,889	476	16	2,381	10.39
*TRACTOR TRAILER	1,447	392	32	1,871	8.17
*HEAVY TRUCK/TRAILER	578	116	6	700	3.06
LOCAL TRANSIT BUS	384	119	4	507	2.21
*TRACTOR TRAILER & PUP	358	136	13	507	2.21
*LOGGING TRUCK/POLE TRL	314	107	8	429	1.87
LIGHT TRUCK/TRAILER	281	51	1	333	1.45
TRUCK AND CAMPER	199	96	0	295	1.29
TOW TRUCK	184	63	1	248	1.08
SCHOOL BUS	143	37	0	180	0.79
INTERCITY BUS	104	33	2	139	0.61
GENERAL CONSTRUCTION	86	19	3	108	0.47
TRUCK, CAMPER AND TRAILER	54	29	1	84	0.37
ROAD CONSTRUCTION	38	12	1	51	0.22
CAR & TRAILER	32	13	0	45	0.20
MOTOR HOME	27	4	0	31	0.14
BICYCLE	3	20	0	23	0.10
MOTORCYCLE	6	14	0	20	0.09
MOBILE CRANE	8	1	0	9	0.04
TRAILER ONLY	8	1	0	9	0.04
MOPED	0	6	0	6	0.03
FARM VEHICLE	4	1	0	5	0.02
MOTOR HOME/TRAILER	4	0	0	4	0.02
ATV - ALL TERRAIN CYCLE	0	1	0	1	0.00
MOBILE HOME	1	0	0	1	0.00
OTHER	39	16	1	56	0.24
UNKNOWN	51	10	0	61	0.27
TOTAL	17,342	5,436	129	22,907	100.00

*These vehicles are defined as weighing 10,900 kg or over.

1989 COMMERCIAL VEHICLE ACCIDENTS

PRIMARY ACCIDENT OCCURRENCE BY ACCIDENT TYPE

PRIMARY ACCIDENT OCCURRENCE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
REAR END	3,503	1,703	8	5,214	23.02
RIGHT ANGLE COLLISION	1,676	858	13	2,547	11.25
BACKING UP	1,489	41	1	1,531	6.76
SIDE SWIPE	1,168	225	9	1,402	6.19
OFF ROAD - RIGHT	854	451	12	1,317	5.81
LEFT TURN ACROSS ONCOMING TRAFFIC	544	253	3	800	3.53
OVERTAKING	714	74	1	789	3.48
OFF ROAD - LEFT	467	291	7	765	3.38
HEAD ON	452	253	40	745	3.29
LEFT TURN - HEAD ON	276	79	1	356	1.57
RIGHT TURN - REAR END	153	25	0	178	0.79
LEFT TURN - ONE WAY	130	17	0	147	0.65
RIGHT TURN - HEAD ON	75	19	0	94	0.42
ONE WAY STREET	61	14	0	75	0.33
RIGHT TURN - SAME DIRECTION	60	6	0	66	0.29
RIGHT TURN - OPPOSITE DIRECTION	26	2	0	28	0.12
OTHER	4,396	615	14	5,025	22.19
UNKNOWN	1,318	247	6	1,571	6.94
TOTAL	17,362	5,173	115	22,650	100.00

NOTE: The primary accident occurrence categories were modified for 1987 data, therefore comparison between 1987 and prior years is not recommended.

1989 COMMERCIAL VEHICLE ACCIDENTS

ACCIDENT LOCATION BY ACCIDENT TYPE

ACCIDENT LOCATION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BETWEEN INTERSECTIONS	6,899	2,088	77	9,064	40.02
AT INTERSECTION	5,792	2,221	17	8,030	35.45
PARKING LOT	1,611	51	0	1,662	7.34
ROAD/DRIVEWAY INTERSECTION	1,242	312	7	1,561	6.89
BRIDGE	334	141	8	483	2.13
OFF HIGHWAY	280	63	1	344	1.52
INDUSTRIAL ROAD	167	56	2	225	0.99
ENTRANCE RAMP	97	24	0	121	0.53
EXIT RAMP	63	25	0	88	0.39
RAILROAD CROSSING	62	13	1	76	0.34
ENTRANCE ACCELERATION LANE	51	16	0	67	0.30
ENTRANCE INTERSECTION	36	10	0	49	0.22
FERRY OR DOCK	37	4	0	41	0.18
TUNNEL	24	13	0	37	0.16
EXIT INTERSECTION	19	11	0	30	0.13
EXIT DECELERATION LANE	15	12	0	27	0.12
TRANSIT EXPRESS LANE	8	0	0	8	0.04
OTHER	82	20	2	104	0.46
UNKNOWN	540	93	0	633	2.79
TOTAL	17,362	5,173	115	22,650	100.00

1989 COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-PROPERTY DAMAGE ACCIDENTS ONLY-

VEHICLE TYPE	CANADA							USA				
	BC	AB	MB	SK	ON	YT	OTHER CANADIAN	WA	OR	CA	ID	OTHER USA
PASSENGER CAR	12,884	617	20	49	128	5	41	41	8	53	1	46
SINGLE UNIT TRUCK, LIGHT	7,363	251	14	27	41	7	23	15	2	11	0	9
*SINGLE UNIT TRUCK, HEAVY	2,236	70	4	7	15	2	1	12	1	0	1	8
*TRACTOR TRAILER	1,106	187	17	32	25	3	3	37	2	2	4	20
*HEAVY TRUCK/TRAILER	510	50	4	6	11	0	1	3	1	2	1	11
*TRACTOR TRAILER AND PUP	258	64	4	13	2	2	1	8	0	0	0	1
*LOGGING TRUCK AND POLE TRAILER	309	4	0	0	1	0	0	0	0	0	0	0
LOCAL TRANSIT BUS	308	1	0	1	0	0	0	2	0	0	0	0
LIGHT TRUCK/TRAILER	253	15	4	0	2	0	0	1	1	0	0	2
TRUCK AND CAMPER	223	5	1	0	1	0	2	0	0	0	0	2
TOW TRUCK	174	0	0	0	1	0	0	0	0	0	0	0
SCHOOL BUS	135	0	0	0	0	0	0	0	0	0	0	0
INTERCITY BUS	83	2	0	1	2	0	0	5	0	1	1	0
GENERAL CONSTRUCTION	74	1	0	0	0	0	0	0	0	0	0	0
TRUCK CAMPER AND TRAILER	58	6	0	1	0	0	0	0	0	0	0	3
MOTOR HOME	42	1	0	0	2	0	1	0	1	1	1	5
CAR AND TRAILER	51	3	0	0	1	0	1	0	0	0	0	1
ROAD CONSTRUCTION	40	0	0	0	0	0	0	0	0	0	0	1
MOTORCYCLE	29	4	0	0	1	0	0	0	0	0	0	0
BICYCLE	19	0	0	0	0	0	0	0	0	0	0	0
TRAILER ONLY	9	0	0	0	0	0	0	0	0	0	0	0
FARM VEHICLE	6	0	0	0	0	0	0	0	0	1	0	0
MOBILE CRANE	6	0	0	1	0	0	0	0	0	0	0	0
MOTORHOME/TRAILER	2	0	0	1	0	0	0	1	0	0	0	2
OTHER	36	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN	71	2	0	0	0	0	0	1	0	0	0	0
TOTAL	26,271	1,283	68	138	232	19	74	126	16	71	9	101

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

cont'd...

1989 COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-PROPERTY DAMAGE ACCIDENTS ONLY-

cont'd ...

VEHICLE TYPE	FOREIGN DRIVER'S LICENCE	UNKNOWN	TOTAL	PERCENT OF TOTAL
PASSENGER CAR	209	2,370	15,957	48.39
SINGLE UNIT TRUCK, LIGHT	24	875	8,662	26.26
*SINGLE UNIT TRUCK, HEAVY	2	604	2,963	8.98
*TRACTOR TRAILER	0	232	1,670	5.06
*HEAVY TRUCK/TRAILER	1	146	747	2.26
*TRACTOR TRAILER AND PUP	0	40	393	1.19
*LOGGING TRUCK AND POLE TRAILER	0	30	344	1.04
LOCAL TRANSIT BUS	0	82	393	1.19
LIGHT TRUCK/TRAILER	2	33	313	0.95
TRUCK AND CAMPER	1	39	274	0.83
TOW TRUCK	0	22	197	0.60
SCHOOL BUS	0	13	148	0.45
INTERCITY BUS	0	10	105	0.28
GENERAL CONSTRUCTION	0	16	91	0.24
TRUCK CAMPER AND TRAILER	2	10	80	0.25
MOTOR HOME	16	13	83	0.22
CAR AND TRAILER	1	13	70	0.22
ROAD CONSTRUCTION	0	0	40	0.12
MOTORCYCLE	0	19	53	0.17
BICYCLE	0	8	27	0.08
TRAILER ONLY	0	11	21	0.06
FARM VEHICLE	1	0	7	0.02
MOBILE CRANE	0	2	8	0.03
MOTORHOME/TRAILER	0	1	7	0.02
OTHER	0	17	53	0.16
UNKNOWN	0	199	273	0.83
TOTAL	169	4,805	32,982	100.00

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

1989 COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-PERSONAL INJURY ACCIDENTS ONLY-

VEHICLE TYPE	CANADA							USA				
	BC	AB	MB	SK	ON	YT	OTHER CANADIAN	WA	OR	CA	ID	OTHER USA
PASSENGER CAR	4,290	136	12	15	41	5	12	31	2	11	0	16
SINGLE UNIT TRUCK, LIGHT	2,433	74	3	5	11	0	7	7	2	1	0	8
*SINGLE UNIT TRUCK, HEAVY	524	26	2	7	0	3	0	4	0	0	0	3
*TRACTOR TRAILER	290	64	11	6	5	1	1	9	0	0	1	2
BICYCLE	168	0	0	0	1	0	0	0	0	0	0	0
*TRACTOR TRAILER AND PUP	90	32	0	11	1	1	1	2	0	0	0	1
TRUCK AND CAMPER	134	0	0	0	0	0	0	0	1	0	0	0
*HEAVY TRUCK/TRAILER	107	11	0	0	0	0	0	1	0	0	0	1
LOCAL TRANSIT BUS	110	0	0	0	0	0	0	0	0	0	0	0
*LOGGING TRUCK AND POLE TRAILER	108	0	0	0	0	0	0	0	0	0	0	0
MOTORCYCLE	87	1	0	0	1	0	2	1	0	0	0	2
TOW TRUCK	62	2	0	0	0	0	0	0	0	0	0	0
LIGHT TRUCK/TRAILER	44	3	0	1	0	0	2	1	0	0	0	1
TRUCK CAMPER AND TRAILER	32	2	0	0	0	0	1	0	0	1	0	0
INTERCITY BUS	29	1	0	0	0	0	0	2	1	0	0	0
CAR AND TRAILER	21	2	2	0	1	0	1	0	0	0	0	2
SCHOOL BUS	35	1	0	0	0	0	0	0	0	0	0	0
GENERAL CONSTRUCTION	20	0	0	0	0	0	0	0	0	0	0	0
MOTOR HOME	9	1	0	0	0	0	0	0	1	0	0	1
ROAD CONSTRUCTION	11	0	0	0	0	0	0	0	0	0	0	0
ATV - SNOW MOBILE	3	0	0	0	0	0	0	0	0	0	0	0
MOPED	3	0	0	0	0	0	0	1	0	1	0	0
TRAILER ONLY	2	0	0	0	0	0	0	0	0	0	0	0
ATV - ALL TERRAIN CYCLE	1	1	0	0	0	0	0	0	0	0	0	0
FARM VEHICLE	2	0	0	0	0	0	0	0	0	0	0	0
MOTOR HOME	2	0	0	0	0	0	0	0	0	0	0	0
OTHER	225	0	0	0	0	0	1	1	0	0	1	0
UNKNOWN	23	0	0	0	0	0	1	0	0	0	0	0
TOTAL	9,495	357	30	45	61	10	29	60	7	14	2	37

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

cont'd...

1989 COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-PERSONAL INJURY ACCIDENTS ONLY-

cont'd ...

VEHICLE TYPE	FOREIGN DRIVER'S LICENCE	UNKNOWN	TOTAL	PERCENT OF TOTAL
PASSENGER CAR	32	195	5,428	50.83
SINGLE UNIT TRUCK, LIGHT	8	93	2,652	24.83
*SINGLE UNIT TRUCK, HEAVY	1	55	625	5.85
*TRACTOR TRAILER	1	38	428	4.00
BICYCLE	0	5	174	1.64
*TRACTOR TRAILER AND PUP	0	6	145	1.36
TRUCK AND CAMPER	0	3	138	1.29
*HEAVY TRUCK/TRAILER	0	11	131	1.23
LOCAL TRANSIT BUS	0	10	120	1.12
*LOGGING TRUCK AND POLE TRAILER	0	4	112	1.04
MOTORCYCLE	0	3	97	0.92
TOW TRUCK	0	2	66	0.62
LIGHT TRUCK/TRAILER	0	4	56	0.52
TRUCK CAMPER AND TRAILER	0	2	38	0.36
INTERCITY BUS	0	0	33	0.31
CAR AND TRAILER	0	0	29	0.27
SCHOOL BUS	0	1	37	0.35
GENERAL CONSTRUCTION	0	0	20	0.19
MOTOR HOME	2	0	14	0.13
ROAD CONSTRUCTION	0	1	12	0.11
ATV - SNOW MOBILE	0	0	3	0.03
MOPED	0	1	6	0.06
TRAILER ONLY	0	3	5	0.05
ATV - ALL TERRAIN CYCLE	0	0	2	0.02
FARM VEHICLE	0	0	2	0.02
MOTOR HOME	0	2	4	0.04
OTHER	0	30	258	2.40
UNKNOWN	0	20	44	0.41
TOTAL	43	489	10,679	100.00

1989 COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-FATAL ACCIDENTS ONLY-

VEHICLE TYPE	CANADA							USA				
	BC	AL	SA	MA	ON	YT	OTHER CANADIAN	WA	OR	CA	ID	OTHER USA
SINGLE UNIT TRUCK, LIGHT	48	3	0	1	0	0	0	0	0	0	0	1
PASSENGER CAR	59	6	1	1	1	0	2	1	0	1	0	0
*TRACTOR TRAILER	22	6	2	0	1	0	0	1	0	0	0	0
*SINGLE UNIT TRUCK, HEAVY	17	1	0	1	0	0	0	0	0	0	0	0
*TRACTOR TRAILER AND PUP	7	4	1	1	0	0	0	0	0	0	0	0
*LOGGING TRUCK AND POLE TRAILER	8	0	0	0	0	0	0	0	0	0	0	0
*HEAVY TRUCK/TRAILER	3	1	0	1	0	0	0	0	0	0	0	0
LOCAL TRANSIT BUS	4	0	0	0	0	0	0	1	0	0	0	0
BICYCLE	3	0	0	0	0	0	0	0	0	0	0	0
GENERAL CONSTRUCTION	3	0	0	0	0	0	0	0	0	0	0	0
MOTORCYCLE	2	1	0	0	0	0	0	0	0	0	0	0
INTERCITY BUS	2	0	0	0	0	0	0	0	0	0	0	0
ATV - ALL-TERRAIN CYCLE	1	0	0	0	0	0	0	0	0	0	0	0
ATV -SNOW MOBILE	1	0	0	0	0	0	0	0	0	0	0	0
CAR & TRAILER	1	0	0	0	0	0	0	0	0	0	0	0
LIGHT TRUCK/TRAILER	1	0	0	0	0	0	0	0	0	0	0	0
ROAD CONSTRUCTION	1	0	0	0	0	0	0	0	0	0	0	0
TOW TRUCK	1	0	0	0	0	0	0	0	0	0	0	0
TRUCK, CAMPER & TRAILER	1	0	0	0	0	0	0	0	0	0	0	0
MOTOR HOME	1	0	0	1	0	0	0	0	0	0	0	0
OTHER	10	0	0	0	0	0	0	0	0	0	0	0
TOTAL	196	22	4	5	1	1	2	3	0	1	0	1

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

cont'd...

1989 COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

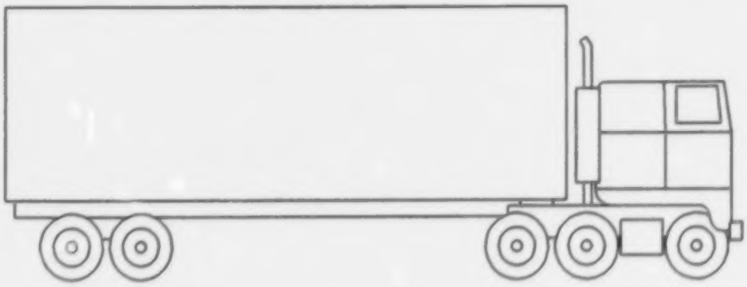
-FATAL ACCIDENTS ONLY-

cont'd ...

VEHICLE TYPE	FOREIGN DRIVER'S LICENCE	UNKNOWN	TOTAL	PERCENT OF TOTAL
SINGLE UNIT TRUCK, LIGHT	0	3	56	23.15
PASSENGER CAR	0	1	73	30.18
*TRACTOR TRAILER	0	0	32	13.22
*SINGLE UNIT TRUCK, HEAVY	0	0	19	7.85
*TRACTOR TRAILER AND PUP	0	0	13	5.37
*LOGGING TRUCK AND POLE TRAILER	0	0	8	3.31
*HEAVY TRUCK/TRAILER	0	0	6	2.48
LOCAL TRANSIT BUS	0	0	4	1.65
BICYCLE	0	0	3	1.24
GENERAL CONSTRUCTION	0	0	3	1.24
MOTORCYCLE	0	0	3	1.24
INTERCITY BUS	0	0	2	0.83
ATV - ALL-TERRAIN CYCLE	0	0	1	0.41
ATV - SNOW MOBILE	0	0	1	0.41
CAR & TRAILER	0	0	1	0.41
LIGHT TRUCK/TRAILER	0	0	1	0.41
ROAD CONSTRUCTION	0	0	1	0.41
TOW TRUCK	0	0	1	0.41
TRUCK, CAMPER & TRAILER	0	0	1	0.41
MOTOR HOME	0	0	1	0.41
OTHER	0	2	12	4.96
TOTAL	0	6	229	100.00

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

SECTION 16



HEAVY COMMERCIAL VEHICLES

1989 ACCIDENTS - HEAVY COMMERCIAL VEHICLES

A heavy commercial vehicle is defined, for the purposes of these reports, as any single or combination truck unit over 10,900 kg GVW (gross vehicle weight). Vehicles in this category include single unit truck/heavy, tractor trailer, tractor trailer and pup, combination unit truck/heavy, and logging truck & pole trailer.

The commercial vehicle reports in Chapter 15 include the heavy commercial vehicles examined in this chapter. In order to do year to year comparisons, it is necessary to refer to the commercial vehicle reports for previous years and identify and extract the heavy commercial vehicle figures appearing in this chapter.

Traffic accidents involving heavy commercial vehicles totalled 7,318 in 1989. Of these, 80% were property damage only, 19% injury and 1% were fatal accidents.

The highest incidence of heavy commercial vehicle accidents was in November.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
MAJOR CONTRIBUTING FACTORS

- ALL DRIVERS/VEHICLES INVOLVED -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	529	208	9	746	12.48
BACKING UNSAFELY	490	13	1	504	8.43
DRIVING AT UNSAFE SPEED	221	175	15	411	6.87
WEATHER CONDITION	285	112	7	404	6.76
FAILING TO YIELD RIGHT OF WAY	254	116	6	376	6.29
FOLLOWING TOO CLOSELY	209	132	0	341	5.70
WILD ANIMAL	225	17	1	243	4.06
CUTTING IN	159	31	0	190	3.18
IMPROPER TURNING	169	19	0	188	3.14
ALCOHOL INVOLVEMENT	91	71	3	165	2.76
IMPROPER PASSING	105	28	0	133	2.22
DRIVER INEXPERIENCE	104	19	1	124	2.07
DRIVING ON WRONG SIDE OF ROAD	63	38	6	107	1.79
INSECURE LOAD	81	25	0	106	1.77
DEFECTIVE BRAKES	66	34	4	104	1.74
VISIBILITY IMPAIRED	81	19	0	100	1.67
IGNORING TRAFFIC CONTROL DEVICE	53	39	1	93	1.56
AVOIDING VEH/PED/CYCLE	55	34	0	89	1.49
ROAD MAINTENANCE/ CONSTRUCTION	68	12	1	81	1.35
OVERSIZE VEHICLE	68	5	2	75	1.25
DRIVERLESS VEHICLE	48	2	0	50	0.84
OBSTRUCTION/DEBRIS ON ROAD	37	7	1	45	0.75
ROAD INTERSECTION/DESIGN	30	9	0	39	0.65
PAVEMENT CONDITION	27	9	2	38	0.64
DOMESTIC ANIMAL	31	4	0	35	0.59
DEFECTIVE TIRES	22	10	1	33	0.55
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	17	10	4	31	0.52
FAILING TO SIGNAL	17	9	0	26	0.43
DEFECTIVE TOW HITCH	22	3	0	25	0.42
FELL ASLEEP	13	12	0	25	0.42
SUNLIGHT GLARE	18	1	0	19	0.32
DEFECTIVE SUSPENSION	14	2	1	17	0.28
INSUFFICIENT TRAFFIC CONTROL	10	5	0	15	0.25
ROADSIZE HAZARD	10	3	0	13	0.22
DEFECTIVE ENGINE	10	2	0	12	0.20
DEFECTIVE STEERING	7	4	0	11	0.18
EXTREME FATIGUE	5	5	1	11	0.18
OTHER	718	231	5	954	15.98
TOTAL	4,432	1,475	72	5,979	100.00

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
MAJOR CONTRIBUTING FACTORS

- HEAVY COMMERCIAL VEHICLE DRIVERS/VEHICLES ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	360	107	2	469	11.79
BACKING UNSAFELY	426	12	1	439	11.04
WILD ANIMAL	255	17	1	243	6.11
DRIVING AT UNSAFE SPEED	127	106	9	242	6.08
WEATHER CONDITION	173	65	3	241	6.06
FOLLOWING TOO CLOSELY	130	100	0	230	5.78
FAILING TO YIELD RIGHT OF WAY	132	57	2	191	4.80
IMPROPER TURNING	147	8	0	155	3.90
CUTTING IN	102	15	0	117	2.94
INSECURE LOAD	74	25	0	99	2.49
DEFECTIVE BRAKES	56	30	4	90	2.26
OVERSIZE VEHICLE	68	4	2	74	1.86
DRIVER INEXPERIENCE	65	5	0	70	1.76
ALCOHOL INVOLVEMENT	45	22	1	68	1.71
VISIBILITY IMPAIRED	54	10	0	64	1.61
ROAD MAINTENANCE/ CONSTRUCTION	49	10	0	59	1.48
AVOIDING VEH/PED/CYCLE	37	18	0	55	1.38
DRIVING ON WRONG SIDE OF ROAD	35	18	2	55	1.38
IMPROPER PASSING	33	12	0	45	1.13
IGNORING TRAFFIC CONTROL DEVICE	18	19	0	37	0.93
DRIVERLESS VEHICLE	35	2	0	37	0.93
DOMESTIC ANIMAL	30	3	0	33	0.83
OBSTRUCTION/DEBRIS ON ROAD	26	5	1	32	0.80
PAVEMENT CONDITION	22	7	1	30	0.75
DEFECTIVE TIRES	20	7	0	27	0.68
ROAD/INTERSECTION DESIGN	19	7	0	26	0.65
DEFECTIVE TOW HITCH	20	2	0	22	0.55
FELL ASLEEP	9	9	0	18	0.45
DEFECTIVE SUSPENSION	14	2	1	17	0.43
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	11	4	1	16	0.40
FAILING TO SIGNAL	12	3	0	15	0.38
ROADSIDE HAZARD	8	3	0	11	0.28
SUNLIGHT GLARE	10	1	0	11	0.28
INSUFFICIENT TRAFFIC CONTROL	7	2	0	9	0.23
DEFECTIVE STEERING	6	2	0	8	0.20
EXTREME FATIGUE	5	3	0	8	0.20
OTHER	486	126	2	614	15.50
TOTAL	3,126	848	33	3,977	100.00

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
MAJOR CONTRIBUTING FACTORS

- OTHER DRIVERS/VEHICLES ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	169	101	7	277	13.84
FAILING TO YIELD RIGHT OF WAY	122	59	4	185	9.24
DRIVING AT UNSAFE SPEED	94	69	6	169	8.44
WEATHER CONDITION	112	47	4	163	8.14
FOLLOWING TOO CLOSELY	79	32	0	111	5.54
ALCOHOL INVOLVEMENT	46	49	2	97	4.85
IMPROPER PASSING	72	16	0	88	4.40
CUTTING IN	57	16	0	73	3.65
BACKING UNSAFELY	64	1	0	65	3.25
IGNORING TRAFFIC CONTROL DEVICE	35	20	1	56	2.80
DRIVER INEXPERIENCE	39	14	1	54	2.70
DRIVING ON WRONG SIDE OF ROAD	28	20	4	52	2.60
VISIBILITY IMPAIRED	27	9	0	36	1.80
AVOIDING VEH/PED/CYCLE	18	16	0	34	1.70
IMPROPER TURNING	22	11	0	33	1.65
ROAD MAINTENANCE/ CONSTRUCTION	19	2	1	22	1.10
(RESULT OF) DIRECTLY PRECEDING ACCIDENT	6	6	3	15	0.75
DEFECTIVE BRAKES	10	4	0	14	0.70
DRIVERLESS VEHICLE	13	0	0	13	0.65
OBSTRUCTION/DEBRIS ON ROAD	11	2	0	13	0.65
ROAD/INTERSECTION DESIGN	11	2	0	13	0.65
FAILING TO SIGNAL	5	6	0	11	0.55
PAVEMENT CONDITION	5	2	1	8	0.40
SUNLIGHT GLARE	8	0	0	8	0.40
DEFECTIVE ENGINE	5	2	0	7	0.35
FELL ASLEEP	4	3	0	7	0.35
INSECURE LOAD	7	0	0	7	0.35
DEFECTIVE TIRES	2	3	1	6	0.30
ILLNESS	2	4	0	6	0.30
INSUFFICIENT TRAFFIC CONTROL	3	3	0	6	0.30
OTHER	241	108	4	353	17.60
TOTAL	1,336	327	39	2,002	100.00

MAJOR CONTRIBUTING FACTORS IN HEAVY COMMERCIAL VEHICLE ACCIDENTS

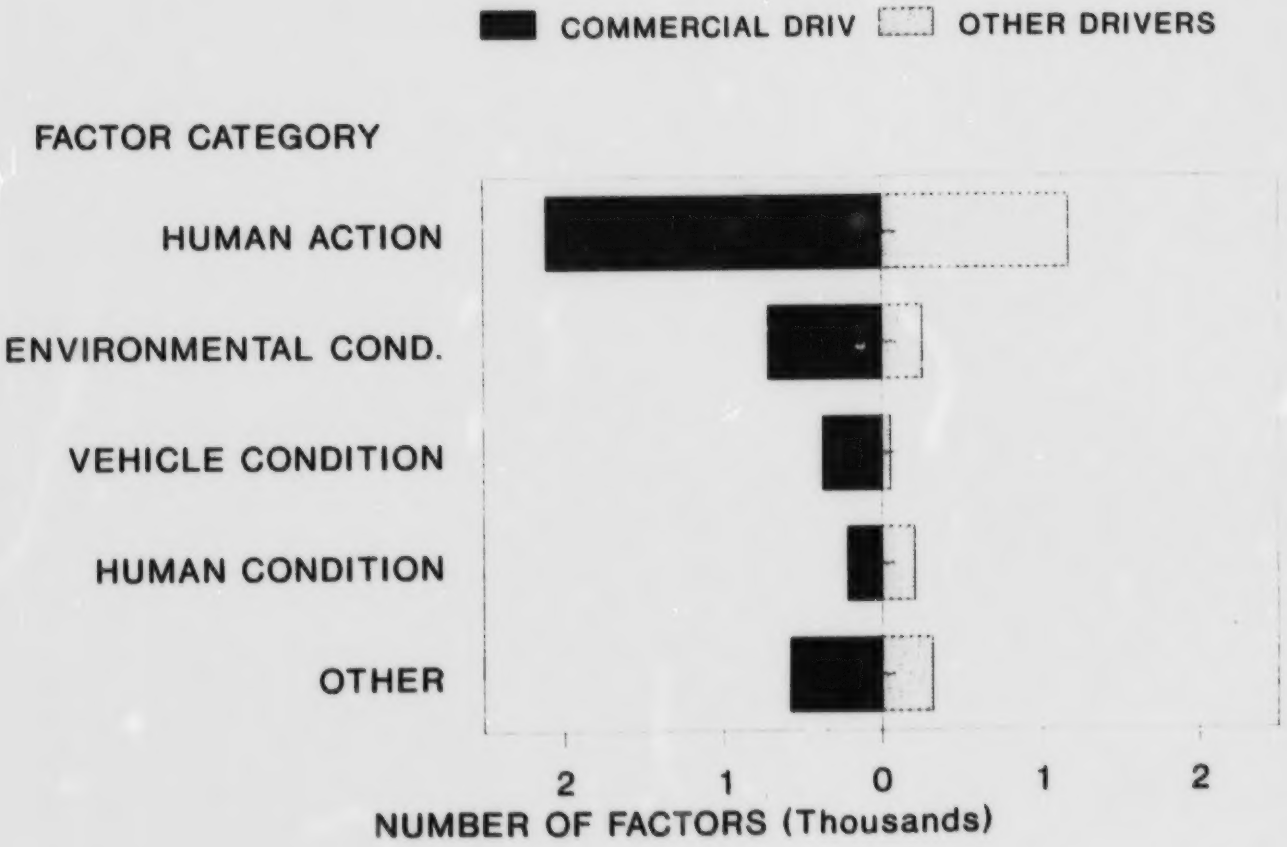


fig. 38

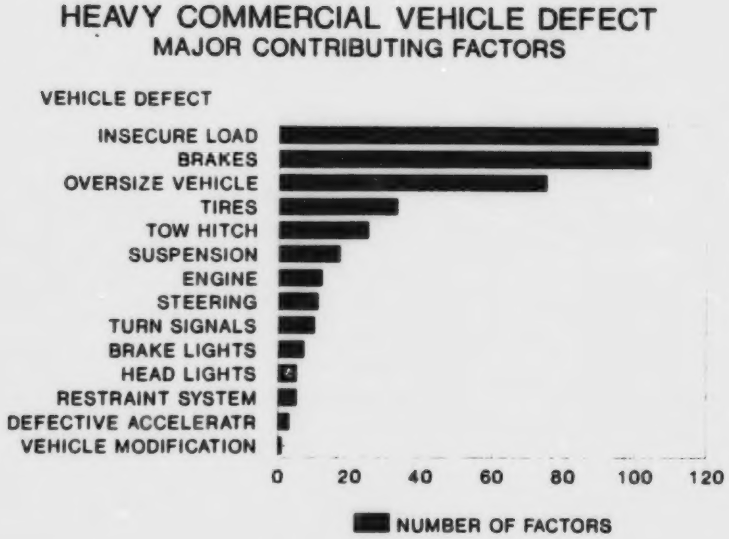

HEAVY COMMERCIAL VEHICLE DEFECT
MAJOR CONTRIBUTING FACTORS
VEHICLE DEFECT
INSECURE LOAD
BRAKES
OVERSIZE VEHICLE
TIRES
TOW HITCH
SUSPENSION
ENGINE
STEERING
TURN SIGNALS
BRAKE LIGHTS
HEAD LIGHTS
RESTRAINT SYSTEM
DEFECTIVE ACCELERATR
VEHICLE MODIFICATION
0
20
40
60
80
100
120
NUMBER OF FACTORS

fig. 39

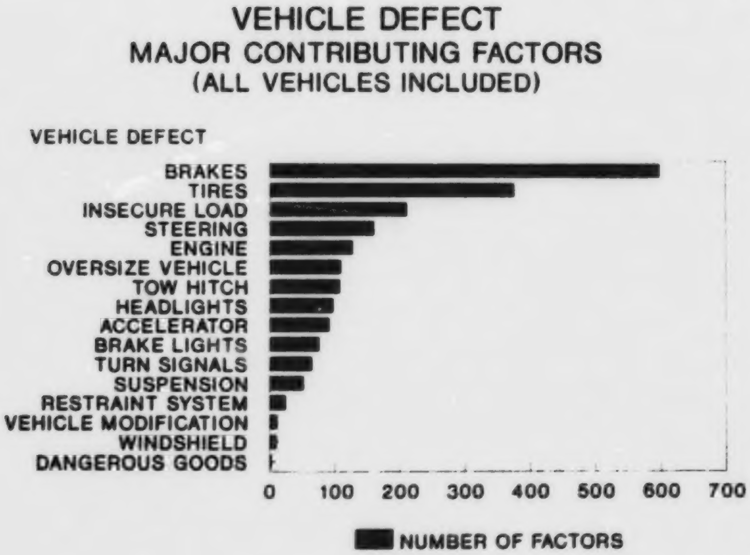

VEHICLE DEFECT
MAJOR CONTRIBUTING FACTORS
(ALL VEHICLES INCLUDED)
VEHICLE DEFECT
BRAKES
TIRES
INSECURE LOAD
STEERING
ENGINE
OVERSIZE VEHICLE
TOW HITCH
HEADLIGHTS
ACCELERATOR
BRAKE LIGHTS
TURN SIGNALS
SUSPENSION
RESTRAINT SYSTEM
VEHICLE MODIFICATION
WINDSHIELD
DANGEROUS GOODS
0
100
200
300
400
500
600
700
NUMBER OF FACTORS

fig. 40

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

NUMBER OF HEAVY COMMERCIAL VEHICLES INVOLVED IN ACCIDENTS BY MONTH

MONTH	NUMBER OF VEHICLES	PERCENT OF TOTAL
JANUARY	743	9.73
FEBRUARY	611	8.00
MARCH	583	7.63
APRIL	433	5.67
MAY	564	7.39
JUNE	628	8.22
JULY	604	7.91
AUGUST	634	8.30
SEPTEMBER	655	8.58
OCTOBER	697	9.13
NOVEMBER	785	10.28
DECEMBER	699	9.15
TOTAL	7,636	100.00

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

PRIMARY ACCIDENT OCCURENCE BY ACCIDENT TYPE

PRIMARY ACCIDENT OCCURRENCE	ACCIDENT TYPE				
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL	TOTAL ACCIDENTS	PERCENT OF TOTAL
REAR END	923	395	6	1,324	18.09
SIDE SWIPE	553	113	8	674	9.21
BACKING UP	544	8	0	552	7.54
OFF ROAD - RIGHT	316	173	4	493	6.74
RIGHT ANGLE COLLISION	301	134	9	444	6.07
OVERTAKING	279	27	0	306	4.18
HEAD ON	180	96	26	302	4.13
OFF ROAD - LEFT	154	114	6	274	3.74
LEFT TURN - ACROSS ONCOMING TRAFFIC	75	40	0	115	1.57
LEFT TURN - HEAD ON	69	18	0	87	1.19
RIGHT TURN - REAR END	40	8	0	48	0.66
LEFT TURN - ONE WAY	35	4	0	39	0.53
RIGHT TURN - SAME DIRECTION	28	2	0	30	0.41
RIGHT TURN - HEAD ON	26	3	0	29	0.40
ONE WAY STREET	20	5	0	25	0.34
RIGHT TURN - OPPOSITE DIRECTION	13	0	0	13	0.18
OTHER	1,805	181	9	1,995	27.26
UNKNOWN	492	72	4	568	7.76
TOTAL	5,853	1,393	72	7,318	100.00

NOTE: The primary accident occurrence categories were modified for 1987 data, therefore comparison between 1987 and prior years is not recommended.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

ACCIDENT LOCATION BY ACCIDENT TYPE

ACCIDENT LOCATION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BETWEEN INTERSECTIONS	2,594	693	49	3,336	45.59
AT INTERSECTION	1,579	448	9	2,036	27.82
PARKING LOT	587	9	0	596	8.14
ROAD/DRIVEWAY INTERSECTION	372	70	5	447	6.11
BRIDGE	125	43	6	174	2.38
OFF HIGHWAY	121	28	1	150	2.05
INDUSTRIAL ROAD	84	30	1	115	1.57
ENTRANCE RAMP	36	4	0	40	0.55
RAILROAD CROSSING	28	5	0	33	0.45
EXIT RAMP	23	7	0	30	0.41
ENTRANCE ACCELERATION LANE	22	4	0	26	0.36
FERRY OR DOCK	19	2	0	21	0.29
ENTRANCE INTERSECTION	13	1	0	14	0.19
TUNNEL	9	5	0	14	0.19
EXIT DECELERATION LANE	6	4	0	10	0.14
EXIT INTERSECTION	4	3	0	7	0.10
TRANSIT EXPRESS LANE	1	0	0	1	0.01
OTHER	43	9	1	53	0.72
UNKNOWN	187	28	0	215	2.94
TOTAL	5,853	1,393	72	7,318	100.00

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

LIGHTING CONDITION BY ACCIDENT TYPE

LIGHTING CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DAYLIGHT	4,375	1,020	47	5,442	74.36
DARK/NO ILLUMINATION	477	144	15	636	8.69
DARK/SOME ILLUMINATION	383	100	6	489	6.68
DARK/FULL ILLUMINATION	268	44	0	312	4.26
DUSK	141	39	1	181	2.47
DAWN	106	35	3	144	1.97
UNKNOWN	101	11	0	112	1.53
OTHER	2	0	0	2	0.03
TOTAL	5,853	1,393	72	7,318	100.00

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

WEATHER CONDITION BY ACCIDENT TYPE

WEATHER CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
CLEAR	2,995	608	33	3,636	49.69
CLOUDY	1,586	391	20	1,997	27.29
RAINING	775	255	7	1,037	14.17
SNOW/SLEET	307	92	11	410	5.60
FOG	55	24	1	80	1.09
SMOG/SMOKE	6	1	0	7	0.10
STRONG WIND	5	2	0	7	0.10
OTHER	1	1	0	2	0.03
UNKNOWN	123	19	0	142	1.94
TOTAL	5,853	1,393	72	7,318	100.00

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

ROADWAY SURFACE CONDITION BY ACCIDENT TYPE

SURFACE CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRY	3,537	757	33	4,327	59.13
WET	1,389	388	13	1,790	24.46
ICY	397	113	13	523	7.15
SNOW	310	79	7	396	5.41
SLUSH	69	26	5	100	1.37
MUDDY	24	9	0	33	0.45
OTHER	4	0	1	5	0.07
UNKNOWN	123	21	0	144	1.97
TOTAL	5,853	1,393	72	7,318	100.00

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-PROPERTY DAMAGE ACCIDENTS ONLY-

VEHICLE TYPE	CANADA							USA				
	BC	AB	MB	SK	ON	YT	OTHER CANADIAN	WA	OR	CA	ID	OTHER USA
*SINGLE UNIT TRUCK, HEAVY	2,236	70	4	7	15	2	1	12	1	0	1	8
PASSENGER CAR	2,518	80	4	16	14	2	8	9	2	5	0	9
*TRACTOR TRAILER	1,106	187	17	32	25	3	3	37	2	2	4	20
SINGLE UNIT TRUCK, LIGHT	671	34	1	4	2	3	2	0	0	1	0	1
*HEAVY TRUCK/TRAILER	510	50	4	6	11	0	1	3	1	2	1	11
*TRACTOR TRAILER AND PUP	258	64	4	13	2	2	1	8	0	0	0	1
*LOGGING TRUCK AND POLE TRAILER	309	4	0	0	1	0	0	0	0	0	0	0
TRUCK AND CAMPER	19	1	0	0	0	0	0	0	0	0	0	0
MOTOR HOME	10	0	0	0	0	0	0	0	1	1	0	2
LIGHT TRUCK/TRAILER	12	1	1	0	0	0	0	0	0	0	0	0
LOCAL TRANSIT BUS	13	0	0	0	0	0	0	0	0	0	0	0
CAR AND TRAILER	11	1	0	0	0	0	1	0	0	0	0	1
TRUCK CAMPER AND TRAILER	7	0	0	0	0	0	0	0	0	0	0	1
GENERAL CONSTRUCTION	6	0	0	0	0	0	0	0	0	0	0	0
MOTORCYCLE	8	0	0	0	0	0	0	0	0	0	0	0
ROAD CONSTRUCTION	7	0	0	0	0	0	0	0	0	0	0	0
TOW TRUCK	7	0	0	0	0	0	0	0	0	0	0	0
TRAILER ONLY	2	0	0	0	0	0	0	0	0	0	0	0
SCHOOL BUS	5	0	0	0	0	0	0	0	0	1	0	0
INTERCITY BUS	4	0	0	0	0	0	0	0	0	0	0	0
BICYCLE	0	0	0	0	0	0	0	0	0	0	0	0
MOBILE CRANE	1	0	0	0	0	0	0	0	0	0	0	0
MOTOR HOME/TRAILER	0	0	0	0	0	0	0	0	0	0	0	1
OTHER	10	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN	2	1	0	0	0	0	0	0	0	0	0	0
TOTAL	7,732	493	35	78	70	12	17	69	7	12	6	55

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-PROPERTY DAMAGE ACCIDENTS ONLY-

cont'd ...

VEHICLE TYPE	FOREIGN DRIVER'S LICENCE	UNKNOWN	TOTAL	PERCENT OF TOTAL
*SINGLE UNIT TRUCK, HEAVY	2	604	2,963	27.42
PASSENGER CAR	20	751	3,438	31.80
*TRACTOR TRAILER	0	232	1,670	15.45
SINGLE UNIT TRUCK, LIGHT	2	222	943	8.72
*HEAVY TRUCK/TRAILER	1	146	741	6.87
*TRACTOR TRAILER AND PUP	0	40	393	3.63
*LOGGING TRUCK AND POLE TRAILER	0	30	344	3.19
TRUCK AND CAMPER	0	7	27	0.25
MOTOR HOME	6	6	26	0.25
LIGHT TRUCK/TRAILER	0	4	18	0.17
LOCAL TRANSIT BUS	0	4	17	0.16
CAR AND TRAILER	0	4	18	0.17
TRUCK CAMPER AND TRAILER	0	2	10	0.10
GENERAL CONSTRUCTION	0	6	12	0.11
MOTORCYCLE	0	6	14	0.13
ROAD CONSTRUCTION	0	0	7	0.06
TOW TRUCK	0	3	10	0.10
TRAILER ONLY	0	7	10	0.10
SCHOOL BUS	0	1	6	0.06
INTERCITY BUS	0	0	4	0.04
BICYCLE	0	3	3	0.03
MOBILE CRANE	0	0	1	0.00
MOTOR HOME/TRAILER	0	0	1	0.00
OTHER	0	4	14	0.13
UNKNOWN	0	112	115	1.06
TOTAL	31	2,194	10,805	100.00

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-PERSONAL INJURY ACCIDENTS ONLY-

VEHICLE TYPE	CANADA							USA				
	BC	AB	MB	SK	ON	YT	OTHER CANADIAN	WA	OR	CA	ID	OTHER USA
*SINGLE UNIT TRUCK, HEAVY	524	26	2	7	0	3	0	4	0	0	0	3
PASSENGER CAR	802	25	1	3	1	1	1	7	0	2	0	3
*TRACTOR TRAILER	290	64	11	6	5	1	1	9	0	0	1	2
SINGLE UNIT TRUCK, LIGHT	252	9	0	0	1	0	1	3	1	0	0	1
*TRACTOR TRAILER AND PUP	90	32	0	11	1	1	1	2	0	0	0	1
*HEAVY TRUCK/TRAILER	107	11	0	0	0	0	0	1	0	0	0	1
*LOGGING TRUCK AND POLE TRAILER	108	4	0	0	1	0	0	0	0	0	0	0
MOTORCYCLE	20	0	0	0	0	0	0	0	0	0	0	1
BICYCLE	26	0	0	0	0	0	0	0	0	0	0	0
TRUCK AND CAMPER	8	0	0	0	0	0	0	0	0	0	0	0
CAR AND TRAILER	3	1	1	0	0	0	1	0	0	0	0	2
TRUCK CAMPER AND TRAILER	5	0	0	0	0	0	0	0	0	1	0	0
LIGHT TRUCK/TRAILER	5	0	0	0	0	0	0	0	0	0	0	0
MOTOR HOME	3	0	0	0	0	0	0	0	1	0	0	0
SCHOOL BUS	4	0	0	0	0	0	0	0	0	0	0	0
ATV - SNOW MOBILE	2	0	0	0	0	0	0	0	0	0	0	0
GENERAL CONSTRUCTION	2	0	0	0	0	0	0	0	0	0	0	0
FARM VEHICLES	1	0	0	0	0	0	0	0	0	0	0	0
INTERCITY BUS	1	0	0	0	0	0	0	0	0	0	0	0
LOCAL TRANSIT BUS	1	0	0	0	0	0	0	0	0	0	0	0
MOTOR HOME/TRAILER	0	0	0	0	0	0	0	0	0	0	1	0
ROAD CONSTRUCTION	1	0	0	0	0	0	0	0	0	0	0	0
TRAILER ONLY	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN	6	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2,262	178	15	27	13	6	5	26	2	3	2	14

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-PERSONAL INJURY ACCIDENTS ONLY-

cont'd ...

VEHICLE TYPE	FOREIGN DRIVER'S LICENCE	UNKNOWN	TOTAL	PERCENT OF TOTAL
*SINGLE UNIT TRUCK, HEAVY	1	55	625	22.81
PASSENGER CAR	2	35	898	32.77
*TRACTOR TRAILER	0	38	428	15.62
SINGLE UNIT TRUCK, LIGHT	3	19	290	10.58
*TRACTOR TRAILER AND PUP	0	6	145	5.38
*HEAVY TRUCK/TRAILER	0	11	131	4.78
*LOGGING TRUCK AND POLE TRAILER	0	4	112	4.09
MOTORCYCLE	0	0	21	0.77
BICYCLE	0	0	26	0.95
TRUCK AND CAMPER	0	1	9	0.33
CAR AND TRAILER	0	0	8	0.29
TRUCK CAMPER AND TRAILER	0	0	6	0.22
LIGHT TRUCK/TRAILER	0	1	6	0.22
MOTOR HOME	1	1	6	0.22
SCHOOL BUS	0	1	5	0.18
ATV - SNOW MOBILE	0	0	2	0.07
GENERAL CONSTRUCTION	0	0	2	0.07
FARM VEHICLES	0	0	1	0.03
INTERCITY BUS	0	0	1	0.03
LOCAL TRANSIT BUS	0	0	1	0.03
MOTOR HOME/TRAILER	0	0	1	0.03
ROAD CONSTRUCTION	0	0	1	0.03
TRAILER ONLY	0	0	1	0.03
OTHER	0	3	3	0.10
UNKNOWN	0	4	10	0.37
TOTAL	7	180	2,740	100.00

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-FATAL ACCIDENTS ONLY-

VEHICLE TYPE	CANADA							USA				
	BC	AB	MB	SK	ON	YT	OTHER CANADIAN	WA	OR	CA	ID	OTHER USA
*TRACTOR TRAILER	22	6	2	0	0	1	0	1	0	0	0	0
PASSENGER CAR	34	5	1	1	1	0	1	1	0	1	0	0
*SINGLE UNIT TRUCK, LIGHT	20	3	0	0	0	0	0	0	0	0	0	0
SINGLE UNIT TRUCK, HEAVY	17	1	0	1	0	0	0	0	0	0	0	0
*TRACTOR TRAILER AND PUP	7	4	1	1	0	0	0	0	0	0	0	0
*LOGGING TRUCK AND POLE TRAILER	8	0	0	0	0	0	0	0	0	0	0	0
*HEAVY TRUCK/TRAILER	3	1	0	1	0	0	0	1	0	0	0	0
MOTORCYCLE	2	1	0	0	0	0	0	0	0	0	0	0
ATV - ALL-TERRAIN CYCLE	1	0	0	0	0	0	0	0	0	0	0	0
BICYCLE	1	0	0	0	0	0	0	0	0	0	0	0
CAR AND TRAILER	1	0	0	0	0	0	0	0	0	0	0	0
TOTAL	116	21	4	4	1	1	1	3	0	1	0	0

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

cont'd...

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
VEHICLE TYPE BY PROVINCE OF DRIVER'S LICENCE

-FATAL ACCIDENTS ONLY-

cont'd ...

VEHICLE TYPE	FOREIGN DRIVER'S LICENCE	UNKNOWN	TOTAL	PERCENT OF TOTAL
*TRACTOR TRAILER	0	0	32	21.05
PASSENGER CAR	0	0	45	29.61
SINGLE UNIT TRUCK, LIGHT	0	0	23	15.13
*SINGLE UNIT TRUCK, HEAVY	0	0	19	12.50
*TRACTOR TRAILER AND PUP	0	0	13	8.55
*LOGGING TRUCK AND POLE TRAILER	0	0	8	5.26
*HEAVY TRUCK/TRAILER	0	0	6	3.95
MOTORCYCLE	0	0	3	1.97
ATV - ALL-TERRAIN CYCLE	0	0	1	0.66
BICYCLE	0	0	1	0.66
CAR AND TRAILER	0	0	1	0.66
TOTAL	0	0	152	100.00

*NOTE: These vehicles are defined as weighing 10,900 kg or over.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS
DRIVER AGE BY ACCIDENT TYPE

-HEAVY COMMERCIAL VEHICLE DRIVERS ONLY-

DRIVER AGE	ACCIDENT TYPE			TOTAL DRIVERS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
01	1	0	0	1	0.01
11 - 15	3	2	0	5	0.07
16	9	1	0	10	0.13
17	15	3	0	18	0.24
18	32	7	0	39	0.51
19	79	18	0	97	1.27
20	83	20	0	103	1.35
21 - 25	644	190	8	842	11.03
26 - 30	868	260	14	1,142	14.96
31 - 35	797	241	17	1,055	13.82
36 - 40	660	172	13	845	11.07
41 - 45	590	134	6	730	9.56
46 - 50	423	122	6	551	7.22
51 - 55	316	72	7	395	5.17
56 - 60	229	50	4	283	3.71
61 - 65	92	23	2	117	1.53
66 - 70	30	4	1	35	0.46
71 - 75	7	0	0	7	0.09
76 - 80	1	0	0	1	0.01
81 - 85	2	0	0	2	0.03
86 - 90	1	0	0	1	0.01
95 +	1	0	0	1	0.01
UNKNOWN	1,234	122	0	1,356	17.76
TOTAL	6,117	1,441	78	7,636	100.00

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY DRIVER AGE
-PROPERTY DAMAGE ACCIDENTS ONLY-
-ALL DRIVERS/VEHICLES INVOLVED-

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	PERCENT OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
DRIVING WITHOUT DUE CARE	1	3	6	10	12	15	70	76	119	85	48	20	13	51	529	11.94
BACKING UNSAFELY	0	2	1	8	13	7	65	70	119	72	52	19	8	54	490	11.06
WEATHER	0	2	2	9	6	2	33	39	73	64	32	11	5	7	285	6.43
FAILING TO YIELD RIGHT OF WAY	1	2	7	6	5	5	31	37	46	46	21	21	14	12	254	5.73
WILD ANIMAL	0	0	0	0	1	2	27	37	68	60	25	3	0	2	225	5.07
DRIVING AT UNSAFE SPEED	0	5	2	3	5	9	39	44	48	27	25	7	1	6	221	4.98
FOLLOWING TOO CLOSELY	0	2	1	3	6	2	33	31	58	28	21	13	3	8	209	4.72
IMPROPER TURNING	0	0	0	0	3	5	20	22	36	32	26	5	5	15	169	3.81
CUTTING IN	0	0	0	2	3	5	22	20	38	25	11	8	4	21	159	3.59
IMPROPER PASSING	0	1	0	4	4	1	10	20	23	8	9	11	6	8	105	2.37
DRIVER INEXPERIENCE	1	8	6	6	8	2	25	16	17	8	2	2	1	2	104	2.35
ALCOHOL INVOLVEMENT	0	0	2	0	7	3	15	17	22	10	2	3	1	9	91	2.05
INSECURE LOAD	0	0	0	2	0	0	5	13	25	14	10	1	0	15	81	1.83
VISIBILITY IMPAIRED	0	0	1	2	3	1	9	13	18	18	14	1	1	0	81	1.83
OVERSIZE VEHICLE	0	0	0	1	0	0	6	11	19	20	9	1	0	1	68	1.53
ROAD MAINTENANCE/ CONSTRUCTION	0	0	0	0	0	0	6	8	27	8	12	4	1	2	68	1.53
DEFECTIVE BRAKES	0	0	0	1	1	0	9	5	21	11	4	1	0	13	66	1.49
DRIVING ON WRONG SIDE OF ROAD	0	0	1	0	2	1	6	8	19	12	6	2	3	3	63	1.42
AVOIDING VEH/PED/ CYCLE	0	1	0	1	1	2	7	8	17	14	4	0	0	0	55	1.24
IGNORING TRAFFIC CONTROL DEVICE	0	0	1	3	2	1	8	2	10	8	9	3	3	3	53	1.20
OTHER	0	2	9	10	17	19	127	161	272	169	109	34	12	115	1,056	22.75
TOTAL	3	28	39	69	99	82	575	654	1,095	739	451	170	81	347	4,432	100.00

NOTE: This report represents first contributing factors attributed to drivers only - pedestrians are not included. "OTHER" includes those factors with less than 53 occurrences, as well as unspecified factors.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY DRIVER AGE
-PERSONAL INJURY ACCIDENTS ONLY-
-ALL DRIVERS/VEHICLES INVOLVED-

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	PERCENT OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
DRIVING WITHOUT DUE CARE	2	4	2	5	3	12	37	47	46	26	14	8	3	10	208	14.10
DRIVING AT UNSAFE SPEED	0	3	1	5	5	5	26	38	47	24	11	5	4	1	175	11.86
FOLLOWING TOO CLOSELY	0	0	0	0	4	5	21	34	37	10	14	4	1	2	132	8.95
FAILING TO YIELD RIGHT OF WAY	0	0	3	4	10	0	16	22	21	19	10	6	3	2	116	7.86
WEATHER	0	0	3	0	4	1	13	23	29	26	10	1	0	2	112	7.59
ALCOHOL INVOLVEMENT	0	0	0	1	0	0	17	14	25	7	3	3	0	1	71	4.81
IGNORING TRAFFIC CONTROL DEVICE	0	0	0	3	0	3	6	7	8	5	2	3	2	0	39	2.64
DRIVING ON WRONG SIDE OF ROAD	0	0	1	1	1	1	2	7	8	7	5	0	1	4	38	2.58
AVOIDING VEH/PED CYCLE	0	0	1	0	1	0	7	6	13	4	1	1	0	0	34	2.31
DEFECTIVE BRAKES	0	0	0	1	0	1	4	12	8	5	3	0	0	0	34	2.31
CUTTING IN	1	0	0	0	0	0	3	4	8	3	2	5	1	4	31	2.10
IMPROPER PASSING	0	0	0	0	1	3	3	1	11	4	2	0	1	2	28	1.90
INSECURE LOAD	0	0	0	0	0	0	3	4	7	6	3	0	0	2	25	1.70
DRIVER INEXPERIENCE	1	0	1	2	3	1	4	0	5	2	0	0	0	0	19	1.29
IMPROPER TURNING	0	0	0	0	0	1	3	5	3	2	1	1	2	1	19	1.29
VISIBILITY IMPAIRED	0	0	0	0	0	0	2	8	3	2	2	0	1	1	19	1.29
WILD ANIMAL	0	0	0	1	0	1	4	4	1	5	1	0	0	0	17	1.15
BACKING UNSAFELY	0	0	0	0	0	0	3	0	3	4	0	0	0	0	13	0.89
OTHER	2	2	2	3	4	9	49	54	96	64	31	17	5	7	345	23.39
TOTAL	6	9	14	26	36	43	223	278	280	225	118	54	24	39	1,475	100.00

NOTE: This report represents first contributing factors attributed to drivers only - pedestrians are not included. "OTHER" includes those factors with less than 13 occurrences, as well as unspecified factors.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY DRIVER AGE
-FATAL ACCIDENTS ONLY-
-ALL DRIVERS/VEHICLES INVOLVED-

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	PERCENT OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
DRIVING AT UNSAFE SPEED	0	0	1	0	0	1	2	2	4	2	0	1	2	0	15	20.83
DRIVING WITHOUT DUE CARE	0	1	1	0	1	0	3	2	0	0	1	0	0	0	9	12.50
WEATHER CONDITION	0	0	0	0	0	0	0	1	1	1	2	2	0	0	7	9.72
DRIVING ON WRONG SIDE OF ROAD	0	1	0	0	0	0	1	0	2	1	0	0	1	0	6	8.33
FAILING TO YIELD RIGHT OF WAY	0	0	1	0	0	0	1	0	1	2	1	0	0	0	6	8.33
(RESULT OF) PRECEDING ACCIDENT	0	0	0	0	0	0	0	0	1	1	0	2	0	0	4	5.56
DEFECTIVE BRAKES	0	0	0	0	0	0	1	3	0	0	0	0	0	0	4	5.56
ALCOHOL INVOLVEMENT	0	0	0	0	1	0	0	0	1	0	1	0	0	0	3	4.17
OVERSIZE VEHICLE	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2.78
PAVEMENT CONDITION	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2.78
BACKING UNSAFELY	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1.39
DEFECTIVE SUSPENSION	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1.39
DEFECTIVE TIRES	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1.39
DRIVER INEXPERIENCE	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1.39
EXTREME FATIGUE	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1.39
IGNORING TRAFFIC CONTROL DEVICE	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1.39
OBSTRUCTION/ DEBRIS ON ROAD	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1.39
OTHER	0	0	1	0	1	1	0	0	0	1	1	0	0	0	7	9.72
TOTAL	0	2	4	0	4	3	10	9	13	10	9	5	3	0	72	100.00

NOTE: This report represents first contributing factors attributed to drivers only - pedestrians are not included. "OTHER" includes unspecified factors.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY DRIVER AGE
-PROPERTY DAMAGE ACCIDENTS ONLY-
-HEAVY COMMERCIAL DRIVERS/VEHICLES ONLY-

CONTRIBUTING FACTORS	DRIVER AGE															
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN	TOTAL	PERCENT OF TOTAL
BACKING UNSAFELY	0	0	1	8	11	6	55	63	111	64	47	14	2	44	426	10.71
DRIVING WITHOUT DUE CARE	1	1	3	3	4	7	50	51	84	69	36	9	3	39	360	9.05
WILD ANIMAL	0	0	0	0	1	2	27	37	68	60	25	3	0	2	225	5.66
WEATHER	0	0	0	1	3	1	19	24	49	45	20	7	0	4	173	4.35
IMPROPER TURNING	0	0	0	0	3	4	18	20	32	30	24	1	2	13	147	3.70
FAILING TO YIELD RIGHT OF WAY	1	1	1	0	1	1	16	24	25	32	11	6	1	12	132	3.32
FOLLOWING TOO CLOSELY	0	2	0	0	2	2	22	19	40	16	17	2	0	8	130	3.27
DRIVING AT UNSAFE SPEED	0	0	0	0	1	5	21	25	34	22	11	5	0	3	127	3.19
CUTTING IN	0	0	0	0	2	2	11	14	29	18	6	1	0	19	102	2.56
INSECURE LOAD	0	0	0	0	0	0	6	9	25	12	8	0	0	14	74	1.86
OVERSIZE VEHICLE	0	0	0	1	0	0	6	11	19	20	9	1	0	1	68	1.71
DRIVER INEXPERIENCE	1	2	4	4	4	1	14	14	11	6	1	0	0	2	65	1.63
DEFECTIVE BRAKES	0	0	0	1	0	0	8	4	19	11	4	1	0	8	56	1.41
VISIBILITY IMPAIRED	0	0	0	0	2	1	6	7	13	13	10	1	0	0	54	1.36
OTHER	0	0	3	4	13	15	111	152	270	167	102	24	0	96	957	30.91
TOTAL	3	6	12	23	47	47	390	474	829	585	331	76	8	265	3,096	100.00

NOTE: This report represents first contributing factors attributed to drivers only - pedestrians are not included. "OTHER" includes those factors with less than 54 occurrences, as well as unspecified factors.

1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY DRIVER AGE
-PERSONAL INJURY ACCIDENTS ONLY-
-HEAVY COMMERCIAL DRIVERS/VEHICLES ONLY-

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	PERCENT OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
DRIVING WITHOUT DUE CARE	1	1	0	0	0	3	20	18	26	18	9	3	0	8	107	12.62
DRIVING AT UNSAFE SPEED	0	0	0	0	2	2	18	18	34	20	8	3	0	1	106	12.50
FOLLOWING TOO CLOSELY	0	0	0	0	3	4	18	28	29	7	7	2	0	2	100	11.79
WEATHER	0	0	0	0	0	1	8	16	16	15	7	0	0	2	65	7.66
FAILING TO YIELD RIGHT OF WAY	0	0	1	0	5	0	7	12	14	7	6	3	0	2	57	6.72
DEFECTIVE BRAKES	0	0	0	1	0	0	4	10	7	5	3	0	0	0	30	3.54
INSECURE LOAD	0	0	0	0	0	0	3	4	7	6	3	0	0	2	25	2.95
ALCOHOL INVOLVEMENT	0	0	0	0	0	0	3	3	9	5	1	0	0	1	22	2.60
IGNORING TRAFFIC CONTROL DEVICE	0	0	0	0	0	0	5	6	4	4	0	0	0	0	19	2.24
AVOIDING VEH/PED/ CYCLIST	0	0	0	0	0	0	3	3	10	2	0	0	0	0	18	2.12
DRIVING ON WRONG SIDE OF ROAD	0	0	0	0	0	0	0	6	3	4	2	0	0	3	18	2.12
WILD ANIMAL	0	0	0	1	0	1	4	4	1	5	1	0	0	0	17	2.00
CUTTING IN	0	0	0	0	0	0	1	3	4	2	1	1	0	3	15	1.77
BACKING UNSAFELY	0	0	0	0	0	0	2	0	3	4	3	0	0	0	12	1.42
IMPROPER PASSING	0	0	0	0	0	1	1	0	7	3	0	0	0	0	12	1.42
ROAD MAINTENANCE/ CONSTRUCTION	0	0	0	0	0	0	0	0	4	4	1	1	0	0	10	1.18
OTHER	0	0	1	2	4	3	29	43	61	38	22	5	0	6	215	25.35
TOTAL	1	1	2	4	14	15	126	174	239	149	74	19	0	30	848	100.00

NOTE: This report represents first contributing factors attributed to drivers only - pedestrians are not included. "OTHER" includes those factors with less than 10 occurrences, as well as unspecified factors.

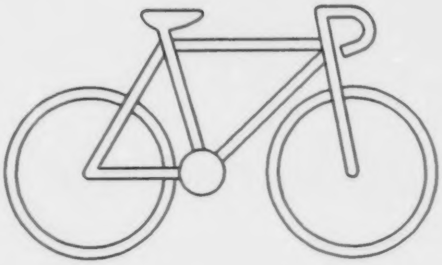
1989 HEAVY COMMERCIAL VEHICLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY DRIVER AGE
-FATAL ACCIDENTS ONLY-
-HEAVY COMMERCIAL DRIVERS/VEHICLES ONLY-

CONTRIBUTING FACTORS	DRIVER AGE														TOTAL FACTORS	PERCENT OF TOTAL
	UNDER 16	16	17	18	19	20	21-25	26-30	31-40	41-50	51-60	61-70	OVER 70	UNKNOWN		
DRIVING AT UNSAFE SPEED	0	0	0	0	0	0	1	2	3	2	0	1	0	0	9	27.27
DEFECTIVE BRAKES	0	0	0	0	0	0	1	3	0	0	0	0	0	0	4	12.12
WEATHER CONDITION	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3	9.09
DRIVING ON WRONG SIDE OF ROAD	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	6.06
DRIVING WITHOUT DUE CARE	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	6.06
FAILING TO YIELD RIGHT OF WAY	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	6.06
OVERSIZE VEHICLE	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	6.06
(RESULT OF) PRECEDING ACCIDENT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3.03
ALCOHOL INVOLVEMENT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3.03
BACKING UNSAFELY	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3.03
DEFECTIVE SUSPENSION	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3.03
OBSTRUCTION/ DEBRIS ON ROAD	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	3.03
PAVEMENT CONDITION	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3.03
WILD ANIMAL	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3.03
OTHER	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	6.06
TOTAL	0	0	0	0	0	0	3	8	8	6	6	2	0	0	33	100.00

NOTE: This report represents first contributing factors attributed to drivers only - pedestrians are not included. "OTHER" includes unspecified factors.

SECTION 17



BICYCLE ACCIDENTS

1989 ACCIDENTS - BICYCLES

Cycles included in this report include both bicycles and tricycles.

A bicycle accident is reportable in British Columbia if it results in injury or death or aggregate property damage of at least $25. At least one motor vehicle must be involved.

There were 2,221 bicycle accidents in 1989, 70 fewer than in 1988. Bicyclists injured totalled 1,934; 10 persons were killed riding cycles.

1989 BICYCLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE
- ALL DRIVERS/VEHICLES INVOLVED -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	43	388	1	432	21.43
FAILING TO YIELD RIGHT OF WAY	31	387	1	419	20.78
DRIVING ON WRONG SIDE OF ROAD	6	98	0	104	5.16
IGNORING TRAFFIC CONTROL DEVICE	6	78	4	88	4.37
DRIVER INEXPERIENCE	4	62	0	66	3.27
CUTTING IN	2	58	1	61	3.03
VISIBILITY IMPAIRED	2	58	0	60	2.98
IMPROPER TURNING	3	54	0	57	2.83
ALCOHOL INVOLVEMENT	3	51	1	55	2.73
UNSAFE SPEED	3	42	1	46	2.28
IMPROPER PASSING	2	42	0	44	2.18
DEFECTIVE HEADLIGHTS	3	33	0	36	1.79
AVOIDING VEH/PED/CYCLE	2	30	0	32	1.59
DEFECTIVE BRAKES	2	18	0	20	0.99
FOLLOWING TOO CLOSELY	1	19	0	20	0.99
BACKING UNSAFELY	3	16	0	19	0.94
PEDESTRIAN ERROR/CONFUSION	0	17	0	17	0.84
WEATHER CONDITION	1	15	0	16	0.79
FAILING TO SIGNAL	2	12	0	14	0.69
OBSTRUCTION/DEBRIS ON ROAD	0	11	0	11	0.55
SUNLIGHT GLARE	0	8	0	8	0.40
INSUFFICIENT TRAFFIC CONTROL	0	4	0	4	0.20
DOMESTIC ANIMAL	0	2	0	2	0.10
NO DRIVER	0	2	0	2	0.10
OVERSIZE VEHICLE	1	1	0	2	0.10
PHYSICAL DISABILITY	0	2	0	2	0.10
ROAD/INTERSECTION DESIGN	1	1	0	2	0.10
OTHER	33	343	1	377	18.70
TOTAL	154	1,852	10	2,016	100.00

NOTE: "OTHER" includes factors with less than 1 occurrence.

1989 BICYCLE ACCIDENTS

MAJOR CONTRIBUTING FACTORS BY ACCIDENT TYPE
- CYCLISTS ONLY -

CONTRIBUTING FACTORS	ACCIDENT TYPE			TOTAL FACTORS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRIVING WITHOUT DUE CARE	19	244	0	263	23.82
FAILING TO YIELD RIGHT OF WAY	16	128	0	144	13.04
DRIVING ON WRONG SIDE OF ROAD	6	94	0	100	9.06
IGNORING TRAFFIC CONTROL DEVICE	5	57	3	65	5.89
DRIVER INEXPERIENCE	4	51	0	55	4.98
CUTTING IN	1	34	1	36	3.26
DEFECTIVE HEADLIGHTS	3	31	0	34	3.08
IMPROPER PASSING	1	29	0	30	2.72
ALCOHOL INVOLVEMENT	1	28	0	29	2.63
UNSAFE SPEED	3	23	0	26	2.36
IMPROPER TURNING	2	17	0	19	1.72
DEFECTIVE BRAKES	1	17	0	18	1.63
PEDESTRIAN ERROR/CONFUSION	0	15	0	15	1.36
VISIBILITY IMPAIRED	1	13	0	14	1.27
AVOIDING VEH/PED/CYCLE	0	9	0	9	0.82
FOLLOWING TOO CLOSELY	0	9	0	9	0.82
OBSTRUCTION/DEBRIS ON ROAD	0	5	0	5	0.45
WEATHER CONDITION	0	5	0	5	0.45
FAILING TO SIGNAL	1	3	0	4	0.36
DOMESTIC ANIMAL	0	2	0	2	0.18
INSUFFICIENT TRAFFIC CONTROL	0	2	0	2	0.18
PHYSICAL DISABILITY	0	2	0	2	0.18
DEFECTIVE BRAKELIGHTS	0	1	0	1	0.09
DEFECTIVE TOW HITCH	0	1	0	1	0.09
PAVEMENT CONDITION	0	1	0	1	0.09
ROADSIDE HAZARD	0	1	0	1	0.09
SUNLIGHT GLARE	0	1	0	1	0.09
UNCONCIOUS	0	1	0	1	0.09
OTHER	16	195	1	212	19.20
TOTAL	80	1,019	5	1,104	100.00

1989 BICYCLE ACCIDENTS

PRIMARY ACCIDENT OCCURRENCE BY ACCIDENT TYPE

PRIMARY ACCIDENT OCCURRENCE	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
RIGHT ANGLE COLLISION	66	526	4	596	26.83
LEFT TURN - ACROSS ONCOMING TRAFFIC	21	147	0	168	7.56
REAR END	12	122	1	135	6.08
OVERTAKING	7	84	1	92	4.14
SIDE SWIPE	14	74	0	88	3.96
RIGHT TURN - HEAD ON	4	43	0	47	2.12
HEAD ON	9	33	0	42	1.89
RIGHT TURN - REAR END	10	31	0	41	1.85
LEFT TURN - HEAD ON	6	30	1	37	1.67
BACKING UP	2	22	0	24	1.08
LEFT TURN - ONE WAY	1	14	0	15	0.68
RIGHT TURN - SAME DIRECTION	1	13	0	14	0.63
OFF ROAD - RIGHT	2	9	0	11	0.50
OFF ROAD - LEFT	3	7	0	10	0.45
RIGHT TURN - OPPOSITE DIRECTION	1	7	0	8	0.36
ONE WAY STREET	1	5	0	6	0.27
OTHER	119	544	3	666	29.99
UNKNOWN	40	181	0	221	9.95
TOTAL	319	1,892	10	2,221	100.00

1989 BICYCLE ACCIDENTS

PRE-COLLISION ACTION BY ACCIDENT TYPE

PRE-COLLISION ACTION	ACCIDENT TYPE			TOTAL ACTIONS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
GOING STRAIGHT AHEAD	335	2,219	15	2,569	56.99
MAKING LEFT TURN	61	439	1	501	11.11
MAKING RIGHT TURN	77	402	0	479	10.63
PARKED LEGALLY	50	133	0	183	4.06
STOPPED IN TRAFFIC	26	69	1	96	2.13
CHANGING LANES	13	63	0	76	1.69
SLOWING OR STOPPING	8	46	0	54	1.20
SWERVING	3	38	1	42	0.93
STARTING IN TRAFFIC	5	35	0	40	0.89
OVERTAKING	3	36	0	39	0.87
BACKING	11	25	0	36	0.80
STARTING FROM PARKED POSITION	5	23	0	28	0.62
ENTERING PARKED POSITION	3	18	0	21	0.47
SKIDDING	1	16	1	18	0.40
MERGING	2	15	0	17	0.38
PARKED ILLEGALLY	4	11	0	15	0.33
MAKING U TURN	0	13	0	13	0.29
AVOIDING OBJECT ON ROAD	0	5	0	5	0.11
N/A	0	1	0	1	0.02
OTHER	8	101	1	110	2.44
UNKNOWN	31	133	1	165	3.66
TOTAL	646	3,841	21	4,508	100.00

1989 BICYCLE ACCIDENTS

ACCIDENT LOCATION BY ACCIDENT TYPE

ACCIDENT LOCATION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
AT INTERSECTION	154	948	6	1,108	49.89
BETWEEN INTERSECTIONS	93	568	2	663	29.85
ROAD/DRIVEWAY INTERSECTION	40	275	0	315	14.18
PARKING LOT	19	44	0	63	2.84
BRIDGE	0	6	2	8	0.36
OFF HIGHWAY	3	5	0	8	0.36
ENTRANCE INTERSECTION	0	5	0	5	0.23
EXIT RAMP	0	5	0	5	0.23
ENTRANCE RAMP	1	3	0	4	0.18
EXIT INTERSECTION	0	4	0	4	0.18
RAILROAD CROSSING	1	1	0	2	0.09
ENTRANCE ACCELERATION LANE	0	1	0	1	0.05
EXIT DECELERATION LANE	0	1	0	1	0.05
OTHER	3	5	0	8	0.36
UNKNOWN	5	21	0	26	1.17
TOTAL	319	1,892	10	2,221	100.00

1989 BICYCLE ACCIDENTS

ROADWAY SURFACE CONDITION BY ACCIDENT TYPE

SURFACE CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DRY	252	1,596	8	1,856	83.57
WET	58	273	1	332	14.95
ICY	0	1	1	2	0.09
SNOW	1	1	0	2	0.09
MUDDY	1	0	0	1	0.09
UNKNOWN	7	21	0	28	1.26
TOTAL	319	1,892	10	2,221	100.00

1989 BICYCLE ACCIDENTS

LIGHTING CONDITION BY ACCIDENT TYPE

ACCIDENT LOCATION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
DAYLIGHT	267	1,581	8	1,856	83.57
DARK/SOME ILLUMINATION	14	119	2	135	6.08
DUSK	13	73	0	86	3.87
DARK/FULL ILLUMINATION	12	67	0	79	3.56
DARK/NO ILLUMINATION	5	20	0	25	1.13
DAWN	2	14	0	16	0.72
UNKNOWN	6	18	0	24	1.08
TOTAL	319	1,892	10	2,221	100.00

1989 BICYCLE ACCIDENTS

WEATHER CONDITION BY ACCIDENT TYPE

SURFACE CONDITION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
CLEAR	220	1,268	7	1,495	67.31
CLOUDY	54	424	2	480	21.61
RAIN	36	166	1	203	9.14
SNOW/SLEET	0	4	0	4	0.18
FOG	0	3	0	3	0.14
STRONG WIND	0	2	0	2	0.09
SMOG/SMOKE	0	1	0	1	0.05
OTHER	0	1	0	1	0.05
UNKNOWN	9	23	0	32	1.44
TOTAL	319	1,892	10	2,221	100.00

1989 BICYCLE ACCIDENTS

ACCIDENT HOUR BY ACCIDENT TYPE

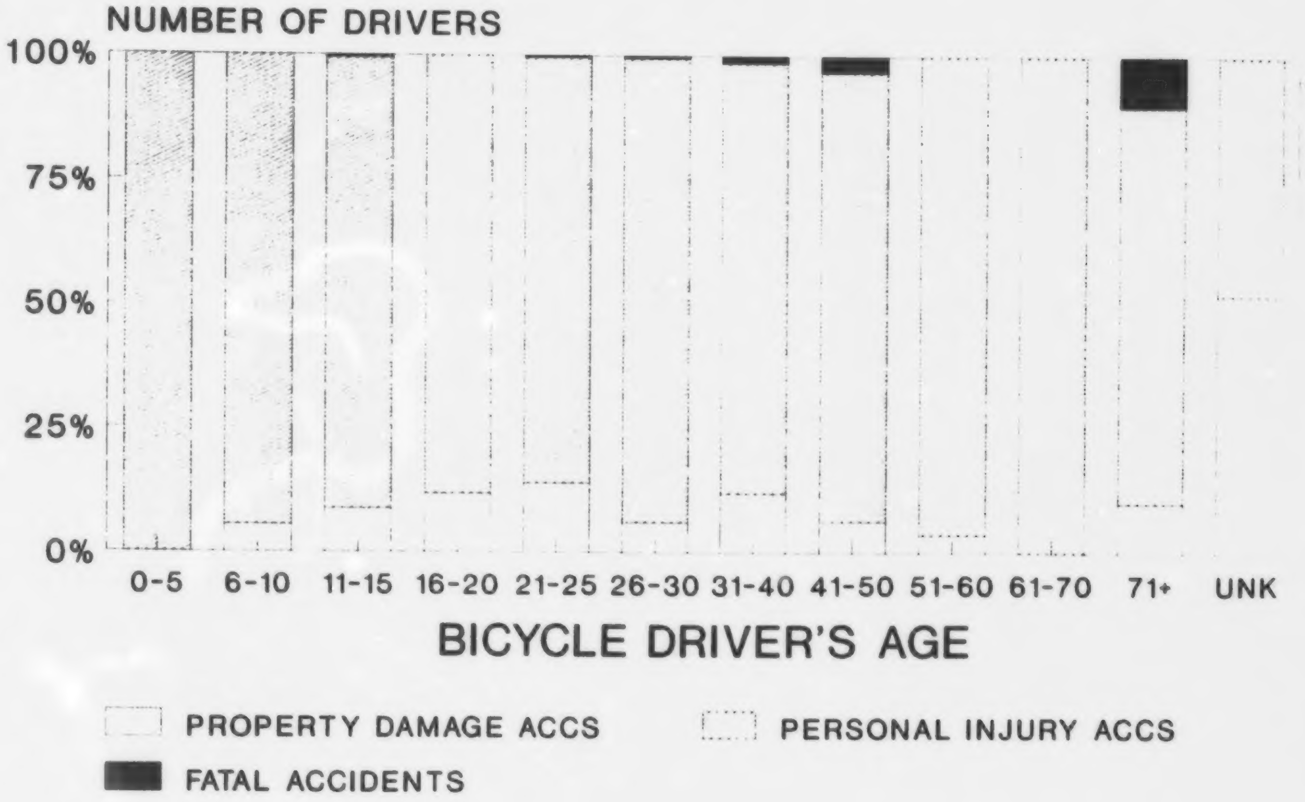
ACCIDENT HOUR	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
Mid. - 1 am	0	9	0	9	0.41
1 am - 2 am	0	8	0	8	0.36
2 am - 3 am	0	7	0	7	0.32
3 am - 4 am	0	4	0	4	0.18
4 am - 5 am	0	3	0	3	0.14
5 am - 6 am	0	1	0	1	0.05
6 am - 7 am	0	12	0	12	0.54
7 am - 8 am	7	58	1	66	2.97
8 am - 9 am	20	99	0	119	5.36
9 am - 10 am	9	45	0	54	2.43
10 am - 11 am	11	59	0	70	3.15
11 am - Noon	13	88	0	101	4.55
Noon - 1 pm	23	122	1	146	6.57
1 pm - 2 pm	16	106	0	122	5.49
2 pm - 3 pm	25	122	1	148	6.66
3 pm - 4 pm	39	227	1	267	12.02
4 pm - 5 pm	34	262	2	298	13.42
5 pm - 6 pm	40	214	2	256	11.53
6 pm - 7 pm	21	137	0	158	7.11
7 pm - 8 pm	14	118	1	133	5.99
8 pm - 9 pm	13	71	0	84	3.78
9 pm - 10 pm	11	55	1	67	3.02
10 pm - 11 pm	7	21	0	28	1.26
11 pm - Mid.	3	19	0	22	0.99
UNKNOWN	13	25	0	38	1.71
TOTAL	319	1,892	10	2,221	100.00

1989 BICYCLE ACCIDENTS

BICYCLE DRIVER'S AGE BY ACCIDENT TYPE

ACCIDENT HOUR	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
1 - 10	13	252	0	265	12.33
11 - 15	38	390	2	430	20.01
16	12	83	0	95	4.42
17	3	62	0	65	3.02
18	12	59	0	71	3.30
19	11	78	0	89	4.14
20	9	68	0	77	3.58
21 - 25	41	253	1	295	13.73
26 - 30	13	200	1	214	9.96
31 - 35	16	113	2	131	6.10
36 - 40	10	76	1	87	4.05
41 - 45	3	44	1	48	2.23
46 - 50	1	14	1	16	0.74
51 - 55	1	14	0	15	0.70
56 - 60	0	13	0	13	0.60
61 - 65	0	16	0	16	0.74
66 - 70	0	4	0	4	0.19
71 - 75	0	4	0	4	0.19
76 - 80	1	3	1	5	0.23
81 - 85	0	1	0	1	0.05
UNKNOWN	108	100	0	208	9.68
TOTAL	292	1,847	10	2,149	100.00

BICYCLE DRIVERS INVOLVED IN ACCIDENTS BY ACCIDENT TYPE AND BICYCLE DRIVER'S AGE



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1989 BICYCLE ACCIDENTS

VICTIMS INJURED BY VICTIM AGE AND SEX BY ACCIDENT HOUR

ACCIDENT	UNKNOWN		1 - 5		6 - 10		11 - 15		16 - 20		21 - 25		26 - 30		31 - 40	
HOUR	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Mid. - 1 am	0	0	0	0	0	0	0	0	2	0	1	0	2	1	1	0
1 am - 2 am	1	0	0	0	0	0	1	0	2	0	0	0	3	1	0	0
2 am - 3 am	1	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0
3 am - 4 am	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	0
4 am - 5 am	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
5 am - 6 am	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
6 am - 7 am	1	0	0	0	0	0	2	0	0	0	2	1	1	0	4	0
7 am - 8 am	0	0	0	0	0	0	9	3	9	4	11	3	8	2	7	0
8 am - 9 am	3	1	0	0	7	1	22	9	7	5	9	6	7	4	8	3
9 am - 10 am	0	2	1	0	6	0	3	1	7	1	5	2	4	3	2	1
10 am - 11 am	4	0	2	1	2	0	5	2	7	4	8	4	4	0	2	9
11 am - Noon	3	0	1	0	4	0	14	5	15	6	7	1	7	3	7	4
Noon - 1 pm	8	0	2	1	10	3	21	3	17	5	15	5	9	6	6	2
1 pm - 2 pm	2	1	1	0	12	1	19	3	20	6	15	5	5	2	6	4
2 pm - 3 pm	6	1	2	1	13	6	21	4	17	10	12	2	8	5	5	2
3 pm - 4 pm	3	4	7	1	25	10	56	18	20	9	21	8	17	4	11	3
4 pm - 5 pm	5	3	1	0	39	11	37	20	37	16	25	10	16	10	18	6
5 pm - 6 pm	8	1	5	0	24	7	36	7	29	12	20	12	16	3	17	8
6 pm - 7 pm	6	0	4	1	15	5	18	8	21	7	14	3	11	6	9	3
7 pm - 8 pm	1	0	1	1	10	5	21	5	24	5	10	3	8	3	11	6
8 pm - 9 pm	3	0	0	0	7	1	13	8	12	4	4	4	4	3	7	1
9 pm - 10 pm	6	0	0	0	3	0	12	3	6	2	5	2	5	3	5	0
10 pm - 11 pm	0	0	0	0	0	0	1	1	3	1	3	1	4	0	7	0
11 pm - Mid.	0	0	0	0	0	0	4	0	3	2	4	0	3	0	1	1
UNKNOWN	2	2	0	0	4	4	5	5	3	3	4	4	1	1	3	3
TOTAL	63	15	27	6	181	54	321	108	263	103	197	76	146	60	137	57

1989 BICYCLE ACCIDENTS

VICTIMS INJURED BY VICTIM AGE AND SEX BY ACCIDENT HOUR CONT'D.

ACCIDENT	41 - 50		51 - 60		61 - 70		OVER 70		TOTAL KILLED	
HOUR	M	F	M	F	M	F	M	F	M	F
Mid. - 1 am	1	1	0	0	0	0	0	0	0	0
1 am - 2 am	0	0	0	0	0	0	0	0	0	0
2 am - 3 am	2	0	1	0	0	0	0	0	0	0
3 am - 4 am	0	0	1	0	0	0	0	0	0	0
4 am - 5 am	0	0	0	0	0	0	0	0	0	0
5 am - 6 am	0	0	0	0	0	0	0	0	0	0
6 am - 7 am	0	0	1	0	0	0	0	0	0	0
7 am - 8 am	0	0	0	0	1	0	0	0	0	0
8 am - 9 am	3	1	1	0	0	1	0	0	0	0
9 am - 10 am	1	2	0	0	2	0	2	0	2	0
10 am - 11 am	2	1	1	0	1	1	0	0	0	0
11 am - Noon	2	2	1	0	4	1	0	0	0	0
Noon - 1 pm	5	0	4	2	0	0	0	0	0	0
1 pm - 2 pm	1	4	0	1	2	0	0	0	0	0
2 pm - 3 pm	6	0	0	0	1	0	2	0	2	0
3 pm - 4 pm	3	0	4	1	2	1	0	0	0	0
4 pm - 5 pm	2	1	2	2	0	0	2	0	2	0
5 pm - 6 pm	5	1	0	2	1	0	0	0	0	0
6 pm - 7 pm	2	0	2	0	0	1	1	0	1	1
7 pm - 8 pm	3	1	0	0	1	0	1	0	1	0
8 pm - 9 pm	1	0	0	0	0	0	0	0	0	0
9 pm - 10 pm	3	0	1	0	0	0	0	0	0	0
10 pm - 11 pm	1	0	0	0	0	0	0	0	0	0
11 pm - Mid.	1	0	0	0	0	0	0	0	0	0
UNKNOWN	2	2	0	0	1	1	0	0	0	0
TOTAL	46	16	19	8	16	6	8	0	8	1

1989 BICYCLE ACCIDENTS

VICTIMS KILLED BY VICTIM AGE AND SEX BY ACCIDENT HOUR

ACCIDENT	UNKNOWN		1 - 5		6 - 10		11 - 15		16 - 20		21 - 25		26 - 30		31 - 40	
HOUR	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Mid. - 1 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 am - 2 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 am - 3 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 am - 4 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 am - 5 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 am - 6 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 am - 7 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 am - 8 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8 am - 9 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 am - 10 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 am - 11 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 am - Noon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noon - 1 pm	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1 pm - 2 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 pm - 3 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 pm - 4 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 pm - 5 pm	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
5 pm - 6 pm	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
6 pm - 7 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 pm - 8 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 pm - 9 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 pm - 10 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 pm - 11 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 pm - Mid.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	2	0	0	0	1	0	1	0	3	0

1989 BICYCLE ACCIDENTS

VICTIMS KILLED BY VICTIM AGE AND SEX BY ACCIDENT HOUR CONT'D.

ACCIDENT	41 - 50		51 - 60		61 - 70		OVER 70		TOTAL KILLED	
HOUR	M	F	M	F	M	F	M	F	M	F
Mid. - 1 am	0	0	0	0	0	0	0	0	0	0
1 am - 2 am	0	0	0	0	0	0	0	0	0	0
2 am - 3 am	0	0	0	0	0	0	0	0	0	0
3 am - 4 am	0	0	0	0	0	0	0	0	0	0
4 am - 5 am	0	0	0	0	0	0	0	0	0	0
5 am - 6 am	0	0	0	0	0	0	0	0	0	0
6 am - 7 am	0	0	0	0	0	0	0	0	0	0
7 am - 8 am	0	0	0	0	0	0	0	0	1	0
8 am - 9 am	0	0	0	0	0	0	0	0	0	0
9 am - 10 am	0	0	0	0	0	0	0	0	0	0
10 am - 11 am	0	0	0	0	0	0	0	0	0	0
11 am - Noon	0	0	0	0	0	0	0	0	0	0
Noon - 1 pm	0	0	0	0	0	0	0	0	1	0
1 pm - 2 pm	0	0	0	0	0	0	0	0	0	0
2 pm - 3 pm	0	0	0	0	0	0	1	0	1	0
3 pm - 4 pm	0	0	0	0	0	0	0	0	1	0
4 pm - 5 pm	0	0	0	0	0	0	0	0	2	0
5 pm - 6 pm	0	0	0	0	0	0	0	0	2	0
6 pm - 7 pm	0	0	0	0	0	0	0	0	0	0
7 pm - 8 pm	1	0	0	0	0	0	0	0	1	0
8 pm - 9 pm	0	0	0	0	0	0	0	0	0	0
9 pm - 10 pm	1	0	0	0	0	0	0	0	1	0
10 pm - 11 pm	0	0	0	0	0	0	0	0	0	0
11 pm - Mid.	0	0	0	0	0	0	0	0	0	0
UNKNOWN	0	0	0	0	0	0	0	0	0	0
TOTAL	2	0	0	0	0	0	1	0	10	0

1989 BICYCLE ACCIDENTS

CYCLISTS INVOLVED BY VICTIM TYPE

VICTIM TYPE	BICYCLE DRIVERS	BICYCLE PASSENGERS	TOTAL CYCLISTS	PERCENT OF TOTAL
NOT INJURED	304	35	339	14.96
INJURED	1,835	81	1,916	84.60
KILLED	10	0	10	0.44
TOTAL	2,149	166	2,265	100.00

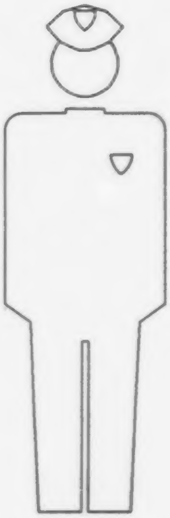
1989 BICYCLE ACCIDENTS
MAJOR CONTRIBUTING FACTORS BY BICYCLE DRIVER'S AGE

CONTRIBUTING FACTORS	DRIVER AGE										
	1-5	6-10	11-15	16	17	18	19	20	21-25	26-30	31-35
DRIVING WITHOUT DUE CARE	3	59	77	10	10	6	9	9	22	13	5
FAILING TO YIELD	3	35	39	3	4	7	5	4	14	12	2
DRIVING ON WRONG SIDE OF ROAD	2	10	41	10	2	0	7	2	8	5	3
IGNORING TRAFFIC CONTROL DEVICE	1	10	19	5	3	2	2	1	8	3	3
DRIVER INEXPERIENCE	4	21	19	2	1	1	0	1	1	1	0
CUTTING IN	1	4	10	1	2	2	1	1	3	1	4
DEFECTIVE HEADLIGHTS	0	0	5	2	1	1	3	2	6	4	4
IMPROPER PASSING	0	1	2	3	0	2	3	2	6	5	3
ALCOHOL INVOLVEMENT	0	0	0	1	0	0	1	0	5	9	5
UNSAFE SPEED	0	0	8	3	0	2	3	1	4	0	2
IMPROPER TURNING	0	4	2	3	0	0	1	1	1	3	1
DEFECTIVE BRAKES	1	5	9	0	1	0	0	1	0	0	0
PEDESTRIAN ERROR	1	7	5	0	0	0	0	1	0	0	0
VISIBILITY IMPAIRED	0	2	4	1	1	0	1	0	0	1	0
AVOIDING VEH/PED/CYCLE	0	0	1	0	0	2	1	0	2	0	1
FOLLOWING TOO CLOSELY	0	0	0	1	0	0	0	1	3	4	0
OBSTRUCTION/DEBRIS ON ROAD	0	0	1	1	0	0	1	0	0	0	0
WEATHER CONDITION	0	1	2	0	0	0	0	0	1	0	0
FAILING TO SIGNAL	0	0	0	0	0	1	0	0	0	0	0
DOMESTIC ANIMAL	0	0	0	0	0	0	0	1	0	1	0
PHYSICAL DISABILITY	0	0	0	0	0	0	0	0	1	0	0
INSUFFICIENT TRAFFIC CONTROL	0	0	0	0	0	1	0	0	1	0	0
OTHER	2	27	50	13	7	12	9	0	35	13	13
TOTAL	18	186	294	59	32	39	47	32	121	75	46

1989 BICYCLE ACCIDENTS
MAJOR CONTRIBUTING FACTORS BY BICYCLE DRIVER'S AGE CONT'D

CONTRIBUTING FACTORS	DRIVER AGE 36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	OVER 80	TOTAL FACTORS
DRIVING WITHOUT DUE CARE	8	5	0	0	0	3	0	0	0	0	263
FAILING TO YIELD	1	1	0	0	3	1	0	0	0	0	144
DRIVING ON WRONG SIDE OF ROAD	1	0	2	1	0	0	0	0	0	0	100
IGNORING TRAFFIC CONTROL DEVICE	0	2	2	0	1	0	0	0	0	0	65
DRIVER INEXPERIENCE	1	0	0	0	0	0	0	0	0	0	55
CUTTING IN	2	0	0	0	0	0	1	0	1	0	36
DEFECTIVE HEADLIGHTS	3	0	1	1	0	0	0	0	0	0	34
IMPROPER PASSING	1	0	0	1	0	0	0	0	0	0	30
ALCOHOL INVOLVEMENT	4	2	0	0	0	0	0	0	0	0	29
UNSAFE SPEED	0	0	0	0	0	0	0	0	0	0	26
IMPROPER TURNING	1	0	0	0	0	1	0	0	0	0	19
DEFECTIVE BRAKES	0	0	0	0	0	0	0	0	0	0	18
PEDESTRIAN ERROR	0	0	0	0	0	1	0	0	0	0	15
VISIBILITY IMPAIRED	1	0	1	0	0	0	0	0	0	0	14
AVOIDING VEH/PED/CYCLE	0	0	0	0	0	0	1	0	0	0	9
FOLLOWING TOO CLOSELY	1	0	0	0	0	0	0	0	0	0	9
OBSTRUCTION/DEBRIS ON ROAD	0	0	0	0	0	0	0	0	0	0	5
WEATHER CONDITION	0	0	0	0	0	0	0	0	0	0	5
FAILING TO SIGNAL	0	1	0	0	0	0	0	1	0	0	4
DOMESTIC ANIMAL	0	0	0	0	0	0	0	0	0	0	2
PHYSICAL DISABILITY	0	0	0	0	0	0	0	0	0	0	2
INSUFFICIENT TRAFFIC CONTROL	0	0	0	0	0	0	0	0	0	0	2
OTHER	13	5	1	0	1	1	1	0	1	0	2
TOTAL	37	16	7	3	5	7	3	1	2	0	1,104

SECTION 18



POLICE JURISDICTION REPORTS ACCIDENT & VICTIM SUMMARIES

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

KELOWNA SUBDIVISION RCMP

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
ARMSTRONG	207	155	74.88	49	23.67	3	1.45	82	4
COLDSTREAM (MUN.)	64	44	68.75	20	31.25	0	0.00	26	0
ENDERBY	185	131	70.81	51	27.57	3	1.62	73	4
FALKLAND	92	65	70.65	26	28.26	1	1.09	38	2
KELOWNA (MUN.)	2,528	1,826	72.23	692	27.37	10	0.40	946	10
KELOWNA (RURAL)	989	716	72.40	265	26.79	8	0.81	390	8
KEREMEOS	131	91	69.47	36	27.48	4	3.05	66	6
LUMBY	169	128	75.74	40	23.67	1	0.59	55	1
OLIVER	240	180	75.00	59	24.58	1	0.42	79	3
OSOYOOS	177	135	76.27	41	23.16	1	0.56	51	1
PENTICTION (MUN.)	895	674	75.31	219	24.47	2	0.22	299	2
PENTICTION (RURAL)	340	226	66.47	113	33.24	1	0.29	186	1
PRINCETON	482	364	75.52	111	23.03	7	1.45	178	7
REVELSTOKE	406	322	79.31	81	19.95	3	0.74	140	3
REVELSTOKE (MUN.)	123	106	86.18	17	13.82	0	0.00	26	0
SALMON ARM (MUN.)	336	245	72.92	91	27.08	0	0.00	127	0
SALMON ARM (RURAL)	151	106	70.20	44	29.14	1	0.66	69	1
SICAMOUS	196	128	65.31	68	34.69	0	0.00	104	0
SUMMERLAND	194	146	75.26	47	24.23	1	0.52	74	1
VERNON (MUN.)	943	735	77.94	206	21.85	2	0.21	264	2
VERNON (PROV.)	398	306	76.88	90	22.61	2	0.50	140	2
TOTAL	9,246	6,829	73.86	2,366	25.59	51	0.55	3,413	58

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

KAMLOOPS SUBDIVISION RCMP

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
ALEXIS CREEK	124	78	62.90	44	35.48	2	1.61	78	2
ANAHIM LAKE	66	53	80.30	13	19.70	0	0.00	23	0
ASHCROFT	169	108	63.91	58	34.32	3	1.78	84	3
BARRIERE	164	120	73.17	39	23.78	5	3.05	63	6
CHASE	252	162	64.29	83	32.94	7	2.78	152	10
CLEARWATER	264	204	77.27	57	21.59	3	1.14	95	5
CLINTON	131	88	67.18	40	30.53	3	2.29	71	5
KAMLOOPS (MUN.)	2,193	1,527	69.63	658	30.00	8	0.36	945	13
KAMLOOPS (PROV.)	250	156	62.40	89	35.60	5	2.00	139	5
LILLOOET	216	143	66.20	71	32.87	2	0.93	100	2
LOGAN LAKE	87	60	68.97	27	31.03	0	0.00	37	0
LYTTON	132	88	66.67	42	31.82	2	1.52	63	2
MERRITT (MUN.)	170	127	74.71	42	24.71	1	0.59	59	1
MERRITT (PROV.)	381	249	65.35	126	33.07	6	1.57	215	6
100 MILE HOUSE	402	284	70.65	111	27.61	7	1.74	195	8
SPENCES BRIDGE	38	29	76.32	9	23.68	0	0.00	17	0
VALEMOUNT	194	135	69.59	57	29.38	2	1.03	104	2
WILLIAMS LAKE (MUN.)	565	482	85.31	77	13.63	6	1.06	110	6
WILLIAMS LAKE (PROV.)	499	338	67.74	151	30.26	10	2.00	252	13
TOTAL	6,297	4,431	70.37	1,794	28.49	72	1.14	2,802	89

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

NELSON SUBDIVISION RCMP

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
CASTLEGAR (MUN.)	200	158	79.00	41	20.50	1	0.50	61	1
CASTLEGAR (PROV.)	201	147	73.13	54	26.87	0	0.00	70	0
CRANBROOK (MUN.)	544	478	87.87	65	11.95	1	0.18	90	1
CRANBROOK (PROV.)	406	316	77.83	84	20.69	6	1.48	134	8
CRESTON	392	314	80.10	74	18.88	4	1.02	124	4
ELKFORD	66	51	77.27	14	21.21	1	1.52	23	1
FERNIE	264	225	85.23	37	14.02	2	0.76	61	2
FERNIE (MUN.)	67	60	89.55	7	10.45	0	0.00	8	0
FIELD	105	77	73.33	26	24.76	2	1.90	46	2
FRUITVALE	70	49	70.00	21	30.00	0	0.00	27	0
GOLDEN	507	387	76.33	118	23.27	2	0.39	180	3
GRAND FORKS	364	284	78.02	78	21.43	2	0.55	120	3
INVERMERE	254	204	80.31	49	19.29	1	0.39	79	1
KASLO	71	49	69.01	21	29.58	1	1.41	31	1
KIMBERLEY (MUN.)	136	113	83.09	23	16.91	0	0.00	28	0
KIMBERELY (PROV.)	137	104	75.91	32	23.36	1	0.73	53	1
MIDWAY	171	141	82.46	29	16.96	1	0.58	44	2
NAKUSP	194	149	76.80	44	22.68	1	0.52	62	1
NELSON	358	269	75.14	88	24.58	1	0.28	129	1
NEW DENVER	70	55	78.57	14	20.00	1	1.43	23	2
RADIUM	206	162	78.64	43	20.87	1	0.49	80	1
ROSSLAND	135	113	83.70	22	16.30	0	0.00	26	0
SALMO	165	135	81.82	26	15.76	4	2.42	43	4
SPARWOOD	193	145	75.13	48	24.87	0	0.00	76	0
TRAIL (MUN.)	312	249	79.81	62	19.87	1	0.32	81	1
TRAIL (PROV.)	119	94	78.99	25	21.01	0	0.00	34	0
TOTAL	5,707	4,528	79.34	1,145	20.06	34	0.60	1,733	40

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

PRINCE GEORGE SUBDIVISION RCMP

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
BURNS LAKE	236	174	73.73	61	25.85	1	0.42	99	1
CHETWYND	300	241	80.33	57	19.00	2	0.67	92	3
DAWSON CREEK (MUN.)	493	438	88.84	54	10.95	1	0.20	84	2
DAWSON CREEK (PROV.)	367	289	78.75	73	19.89	5	1.36	97	6
FORT NELSON	350	265	75.71	84	24.00	1	0.29	113	1
FORT ST. JAMES	160	132	82.50	25	15.63	3	1.87	38	3
FORT ST. JOHN (MUN.)	609	531	87.19	76	12.48	2	0.33	94	2
FORT ST. JOHN (PROV.)	536	422	78.73	109	20.34	5	0.93	158	9
FRASER LAKE	115	87	75.65	27	23.48	1	0.87	36	1
HUDSON HOPE	59	48	81.36	10	16.95	1	1.69	17	1
MACKENZIE (MUN.)	149	126	84.56	23	15.44	0	0.00	27	0
MACKENZIE (PROV.)	127	89	70.08	37	29.13	1	0.79	48	2
MCBRIDE	180	139	77.22	40	22.22	1	0.56	71	1
PRINCE GEORGE (CITY)	2,766	2,171	78.49	585	21.15	10	0.36	813	12
PRINCE GEORGE (PROV.)	474	315	66.46	150	31.65	9	1.90	236	19
QUESNEL (MUN.)	485	404	83.30	80	16.49	1	0.21	112	1
QUESNEL (PROV.)	431	300	69.61	128	29.70	3	0.70	181	3
TUMBLER RIDGE	150	118	78.67	29	19.33	3	2.00	49	4
VANDERHOOF	248	182	73.39	64	25.81	2	0.81	98	5
WATSON LAKE/TESLIN (YUKON)	38	14	36.84	23	60.53	1	2.63	36	1
WELLS	31	21	67.74	10	32.26	0	0.00	14	0
TOTAL	8,304	6,506	78.35	1,745	21.01	53	0.64	2,513	77

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

PRINCE RUPERT SUBDIVISION RCMP

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
ATLIN/HAINES JCT (YUKON)	19	15	78.95	4	21.05	0	0.00	8	0
BELLA BELLA	27	19	70.37	7	25.93	1	3.70	9	1
BELLA COOLA	66	55	83.33	11	16.67	0	0.00	18	0
CASSIAR	45	32	71.11	13	28.89	0	0.00	20	0
DEASE LAKE/ TELEGRAPH CREEK	66	46	69.70	19	28.79	1	1.52	28	1
GRANISLE	32	24	75.00	8	25.00	0	0.00	12	0
HAZELTON	308	227	73.70	76	24.68	5	1.62	124	5
HOUSTON	177	142	80.23	35	19.77	0	0.00	47	0
KITIMAT (MUN.)	214	175	81.78	37	17.29	2	0.93	54	2
KITIMAT (PROV.)	27	19	70.37	8	29.63	0	0.00	12	0
MASSETT	89	66	74.16	23	25.84	0	0.00	31	0
NEW AIYANSH	63	48	76.19	15	23.81	0	0.00	20	0
PRINCE RUPERT (MUN.)	592	503	84.97	89	15.03	0	0.00	120	0
PRINCE RUPERT (PROV.)	117	94	80.34	22	18.80	1	0.85	37	1
QUEEN CHARLOTTE CITY	79	55	69.62	24	30.38	0	0.00	37	0
SMITHERS	462	361	78.14	99	21.43	2	0.43	159	2
STEWART	158	111	70.25	45	28.48	2	1.27	64	4
TERRACE (MUN.)	392	319	81.38	72	18.37	1	0.26	96	1
TERRACE (PROV.)	384	262	68.23	119	30.99	3	0.78	171	4
TOTAL	3,317	2,573	77.57	726	21.89	18	0.54	1,067	21

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

VANCOUVER SUBDIVISION RCMP

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
COQUITLAM (PROV.)	85	55	64.71	30	35.29	0	0.00	50	0
DEAS ISLAND FWY PATROL (UNIT A)	934	594	63.60	340	36.40	0	0.00	529	0
GIBSONS	304	197	64.80	106	34.87	1	0.33	151	1
LANGLEY CITY	1,193	885	74.18	308	25.82	0	0.00	446	0
LANGLEY TOWNSHIP	1,857	1,305	70.27	542	29.19	10	0.54	851	11
MAPLE RIDGE (MUN.)	1,654	1,194	72.19	452	27.33	8	0.48	694	8
MAPLE RIDGE (PROV.)	168	112	66.67	55	32.74	1	0.60	71	2
PEMBERTON	145	100	68.97	43	29.66	2	1.38	85	2
PITT MEADOWS (MUN.)	159	106	66.67	53	33.33	0	0.00	86	0
PORT MANN FWY PATROL (UNIT B)	1,675	1,126	67.22	545	32.54	4	0.24	855	5
SECHELT	386	270	69.95	113	29.27	3	0.78	153	3
SQUAMISH (MUN.)	384	269	70.05	114	29.69	1	0.26	166	1
SQUAMISH (PROV.)	233	142	60.94	89	38.20	2	0.86	133	2
SURREY (PROV.)	3	3	100.00	0	0.00	0	0.00	0	0
UNIVERSITY	484	378	78.10	106	21.90	0	0.00	140	0
WHISTLER	441	357	80.95	82	18.59	2	0.45	135	2
WHITE ROCK	556	447	80.40	105	18.88	4	0.72	160	4
TOTAL	10,661	7,540	70.73	3,083	28.92	38	0.36	4,705	41

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

CHILLIWACK SUBDIVISION RCMP

18.7

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
ABBOTSFORD (MUN.)	736	542	73.64	192	26.09	2	0.27	276	5
ABBOTSFORD (PROV.)	21	16	76.19	5	23.81	0	0.00	7	0
AGASSIZ	273	192	70.33	74	27.11	7	2.56	98	12
BOSTON BAR	152	101	66.45	47	30.92	4	2.63	81	6
CHILLIWACK (MUN.)	1,523	1,143	75.05	378	24.82	2	0.13	542	2
CHILLIWACK (PROV.)	232	155	66.81	74	31.90	3	1.29	110	6
HOPE	711	513	72.15	191	26.86	7	0.98	314	8
MISSION (MUN.)	197	129	65.48	66	33.50	2	1.02	95	2
MISSION (PROV.)	606	462	76.24	144	23.76	0	0.00	220	0
SUMAS FWY PATROL (UNIT C)	415	237	57.11	170	40.96	8	1.93	293	10
TOTAL	4,866	3,490	71.72	1,341	27.56	35	0.72	2,036	51

BURNABY SUBDIVISION RCMP

18.8

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
BURNABY	9,015	6,916	76.72	2,085	23.13	14	0.16	2,870	17
TOTAL	9,015	6,916	76.72	2,085	23.13	14	0.16	2,870	17

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

COQUITLAM SUBDIVISION RCMP

18.9

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
COQUITLAM (MUN.)	3,273	2,425	74.09	847	25.66	8	0.24	1,161	11
PORT COQUITLAM	1,132	772	68.20	359	31.71	1	0.09	472	1
TOTAL	4,405	3,197	72.58	1,199	27.22	9	0.20	1,633	12

NORTH VANCOUVER SUBDIVISION RCMP

18.10

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
NORTH VANCOUVER CITY	1,894	1,481	78.19	412	21.75	1	0.05	554	1
NORTH VANCOUVER DIST.	1,923	1,436	74.67	485	25.22	2	0.10	629	3
TOTAL	3,817	2,917	76.42	897	23.50	3	0.08	1,183	4

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

RICHMOND SUBDIVISION RCMP

18.11

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
RICHMOND	5,727	4,453	77.75	1,266	22.11	8	0.14	1,710	9
TOTAL	5,727	4,453	77.75	1,266	22.11	8	0.14	1,710	9

SURREY SUBDIVISION RCMP

18.12

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
SURREY	8,281	6,266	75.67	1,989	24.02	26	0.31	3,074	30
TOTAL	8,281	6,266	75.67	1,989	24.02	26	0.31	3,074	30

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

VICTORIA SUBDIVISION RCMP

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
CHEMAINUS	230	160	69.57	69	30.00	1	0.43	102	1
COLWOOD	1,162	811	69.79	350	30.12	1	0.09	491	1
COLWOOD (MUN.)	139	98	70.50	41	29.50	0	0.00	53	0
DUNCAN	597	403	67.50	191	31.99	3	0.50	287	3
DUNCAN (N. COWICHAN)	348	240	68.97	106	30.46	2	0.57	137	2
GABRIOLA ISLAND	66	44	66.67	22	33.33	0	0.00	29	0
GANGES	234	150	64.10	83	35.47	1	0.43	113	1
LADYSMITH	302	223	73.84	75	24.83	4	1.32	112	4
LAKE COWICHAN	159	118	74.21	41	25.79	0	0.00	60	0
NANAIMO (MUN.)	2,427	1,797	74.04	622	25.63	8	0.33	913	9
NANAIMO (PROV.)	249	174	69.88	71	28.51	4	1.61	120	6
NORTH SAANICH (MUN.)	86	42	48.84	42	48.84	2	2.33	71	2
PENDER ISLAND	49	38	77.55	11	22.45	0	0.00	13	0
SHAWNIGAN LAKE	331	222	67.07	106	32.02	3	0.91	170	3
SIDNEY (MUN.)	433	313	72.29	119	27.48	1	0.23	166	1
SIDNEY (PROV.)	35	26	74.29	9	25.71	0	0.00	16	0
SOOKE	300	215	71.67	84	28.00	1	0.33	114	1
TOTAL	7,147	5,074	70.99	2,042	28.57	31	0.43	2,967	34

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

COURTENAY SUBDIVISION RCMP

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
ALERT BAY	46	37	80.43	9	19.57	0	0.00	12	0
CAMPBELL RIVER (MUN.)	960	736	76.67	221	23.02	3	0.31	303	3
CAMPBELL RIVER (PROV.)	376	249	66.22	122	32.45	5	1.33	195	6
COMOX (MUN.)	128	94	73.44	34	26.56	0	0.00	48	0
COURTENAY (MUN.)	616	478	77.60	138	22.40	0	0.00	192	0
COURTENAY (PROV.)	616	431	69.97	177	28.73	8	1.30	268	9
GOLD RIVER	159	114	71.70	44	27.67	1	0.63	69	1
PARKSVILLE	861	612	71.08	245	28.46	4	0.46	367	4
PORT ALBERNI (MUN.)	734	613	83.51	121	16.49	0	0.00	154	0
PORT ALBERNI (PROV.)	307	218	71.01	86	28.01	3	0.98	139	3
PORT ALICE	42	31	73.81	10	23.81	1	2.38	16	1
PORT HARDY	187	147	78.61	40	21.39	0	0.00	62	0
PORT HARDY (MUN.)	43	39	90.70	3	6.98	1	2.33	6	2
PORT MCNEILL	259	190	73.36	69	26.64	0	0.00	107	0
POWELL RIVER (MUN.)	319	248	77.74	71	22.26	0	0.00	99	0
POWELL RIVER (PROV.)	135	97	71.85	38	28.15	0	0.00	54	0
QUADRA ISLAND	46	34	73.91	11	23.91	1	2.17	14	2
SAYWARD	103	76	73.79	27	26.21	0	0.00	41	0
TAHSIS	51	43	84.31	8	15.69	0	0.00	14	0
TEXADA ISLAND	20	8	40.00	11	55.00	1	5.00	15	1
TOFINO	63	43	68.25	19	30.16	1	1.59	28	1
UCLUELET	141	101	71.63	40	28.37	0	0.00	64	0
TOTAL	6,212	4,639	74.68	1,544	24.86	29	0.47	2,267	33

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

MUNICIPAL FORCES

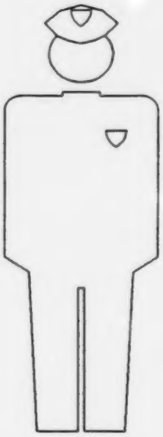
POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
CENTRAL SAANICH	271	201	74.17	68	25.09	2	0.74	110	2
DELTA	2,721	2,127	78.17	584	21.46	10	0.37	813	10
ESQUIMALT	472	363	76.91	109	23.09	0	0.00	135	0
MATSQUI	2.123	1,459	68.72	660	31.09	4	0.19	971	4
NELSON	254	229	90.16	25	9.84	0	0.00	30	0
NEW WESTMINISTER	2,810	2,166	77.08	638	22.70	6	0.21	881	6
OAK BAY	352	262	74.43	89	25.28	1	0.28	116	1
PORT MOODY	743	518	69.72	224	30.15	1	0.13	315	1
SAANICH	2,687	1,952	72.65	730	27.17	5	0.19	1,017	6
VANCOUVER	34,393	28,959	84.20	5,397	15.69	37	0.11	7,356	37
VICTORIA	3,155	2,188	69.35	963	30.52	4	0.13	1,270	4
WEST VANCOUVER	1,763	1,424	80.77	339	19.23	0	0.00	468	0
TOTAL	51,744	41,848	80.88	9,826	18.99	70	0.14	13,482	71

1989 TRAFFIC ACCIDENTS BY POLICE JURISDICTION

OTHER POLICE FORCES

POLICE JURISDICTION	TOTAL ACCIDENTS	PROPERTY DAMAGE ACCIDENTS		PERSONAL INJURY ACCIDENTS		FATAL ACCIDENTS		VICTIMS INJURED	VICTIMS KILLED
		NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION	NUMBER	% OF TOTAL/LOCATION		
C.P.R. POLICE (VAN.)	3	3	100.00	0	0.00	0	0.00	0	0
PORTS CANADA POLICE	33	29	87.88	4	12.12	0	0.00	5	0
TOTAL	36	32	80.00	4	11.11	0	0.00	5	0

SECTION 19



POLICE JURISDICTION REPORTS HIT & RUN ACCIDENT SUMMARIES

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

KELOWNA SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
ARMSTRONG	17	1	0	18	1.56
COLDSTREAM (MUN.)	9	0	0	9	0.78
ENDERBY	19	1	0	20	1.73
FALKLAND	4	0	0	4	0.35
KELOWNA (MUN.)	410	25	1	436	37.77
KELOWNA (PROV.)	83	8	0	91	7.89
KEREMEOS	3	0	0	3	0.26
LUMBY	12	2	0	14	1.21
OLIVER	23	0	0	23	2.00
OSOYOOS	17	1	0	18	1.56
PENTICTON (MUN.)	147	12	0	159	13.78
PENTICTON (PROV.)	40	10	0	50	4.33
PRINCETON	23	1	0	24	2.08
REVELSTOKE	23	0	0	23	2.00
REVELSTOKE (MUN.)	18	0	0	18	1.56
SALMON ARM (MUN.)	32	1	0	33	2.86
SALMON ARM (PROV.)	5	1	0	6	0.52
SICAMOUS	14	4	0	18	1.56
SUMMERLAND	26	4	0	30	2.60
VERNON (MUN.)	116	12	0	128	11.09
VERNON (PROV.)	26	3	0	29	2.51
TOTAL	1,067	86	1	1,154	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

KAMLOOPS SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
ALEXIS CREEK	2	1	0	3	0.47
ANAHIM LAKE	2	0	0	2	0.31
ASHCROFT	13	0	0	13	2.02
BARRIERE	5	2	0	7	1.09
CHASE	17	1	0	18	2.79
CLEARWATER	16	0	0	16	2.48
CLINTON	2	0	0	2	0.31
KAMLOOPS (MUN.)	291	27	1	319	49.53
KAMLOOPS (PROV.)	8	1	0	9	1.40
LILLOOET	20	1	0	21	3.26
LOGAN LAKE	2	0	0	2	0.31
LYTTON	7	0	0	7	1.09
MERRITT (MUN.)	18	3	0	21	3.26
MERRITT (PROV.)	5	1	0	6	0.93
100 MILE HOUSE	32	2	0	34	5.28
SPENSES BRIDGE	4	0	0	4	0.62
VALEMOUNT	6	1	0	7	1.09
WILLIAMS LAKE (MUN.)	130	7	1	138	21.43
WILLIAMS LAKE (PROV.)	14	1	0	15	2.33
TOTAL	594	48	2	644	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

NELSON SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
CASTLEGAR (MUN.)	28	1	0	29	5.73
CASTLEGAR (PROV.)	2	2	0	4	0.79
CRANBROOK (MUN.)	124	4	0	128	25.29
CRANBROOK (PROV.)	17	1	0	18	3.56
CRESTON	27	2	0	29	5.73
ELKFORD	4	2	0	6	1.19
FERNIE	26	0	0	26	5.14
FERNIE (MUN.)	17	0	0	17	3.36
FIELD	4	0	0	4	0.79
FRUITVALE	8	1	0	9	1.78
GOLDEN	29	0	0	29	5.73
GRAND FORKS	24	1	0	25	4.94
INVERMERE	28	0	0	28	5.53
KASLO	4	0	0	4	0.79
KIMBERLEY (MUN.)	16	1	0	17	3.36
KIMBERLEY (PROV.)	3	0	0	3	0.59
MIDWAY	4	0	0	4	0.79
NAKUSP	6	2	0	8	1.58
NELSON	20	1	0	21	4.15
NEW DENVER	2	0	0	2	0.40
RADIUM	6	0	0	6	1.19
ROSSLAND	16	0	0	16	3.16
SALMO	7	0	0	7	1.38
SPARWOOD	16	0	0	16	3.16
TRAIL (MUN.)	41	3	0	44	8.70
TRAIL (PROV.)	6	0	0	6	1.19
TOTAL	485	21	0	506	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

PRINCE GEORGE SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BURNS LAKE	21	2	0	23	2.14
CHETWYND	29	0	0	29	2.70
DAWSON CREEK (MUN.)	101	1	0	102	9.48
DAWSON CREEK (PROV.)	16	0	0	16	1.49
FORT NELSON	34	0	0	34	3.16
FORT ST. JAMES	16	0	0	16	1.49
FORT ST. JOHN (MUN.)	109	5	0	114	10.59
FORT ST. JOHN (PROV.)	27	2	0	29	2.69
FRASER LAKE	8	0	0	8	0.74
HUDSON HOPE	6	0	0	6	0.56
MACKENZIE (MUN.)	25	0	0	25	2.32
MACKENZIE (PROV.)	5	0	0	5	0.46
MCBRIDE	11	1	0	12	1.12
PRINCE GEORGE CITY	448	28	0	476	44.24
PRINCE GEORGE (PROV.)	13	2	0	14	1.30
QUESNEL (MUN.)	92	2	0	95	8.82
QUESNEL (PROV.)	16	0	0	16	1.49
TUMBLER RIDGE	20	0	0	20	1.86
VANDERHOOF	32	1	0	33	3.07
WARSON LK/TESLIN (YUKON)	1	0	0	1	0.09
WELLS	2	0	0	2	0.19
TOTAL	1,032	44	0	1,076	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

PRINCE RUPERT SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
ATLIN; HAINES JCT (Yukon)	2	0	0	2	0.41
BELLA BELLA	4	0	0	4	0.83
BELLA COOLA	6	0	0	6	1.24
CASSIAR	4	0	0	4	0.83
DEASE LAKE/TELEGRAPH CRK	4	0	0	4	0.83
GRANISLE	2	0	0	2	0.41
HAZELTON	26	0	1	27	5.60
HOUSTON	18	0	0	18	3.73
KITIMAT (MUN.)	39	0	0	39	8.07
KITIMAT (PROV.)	3	0	0	3	0.62
MASSET	5	1	0	6	1.24
NEW AIYANSH	4	0	0	4	0.83
PRINCE RUPERT (MUN.)	140	2	0	142	29.40
PRINCE RUPERT (PROV.)	13	0	0	13	2.69
QUEEN CHARLOTTE CITY	9	0	0	9	1.86
SMITHERS	63	2	0	65	13.46
STEWART	16	0	0	16	3.31
TERRACE (MUN.)	69	3	0	72	14.91
TERRACE (PROV.)	46	1	0	47	9.73
TOTAL	473	9	1	483	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

VANCOUVER SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
COQUITLAM (PROV.)	4	0	0	4	0.26
DEAS ISLAND FREEWAY PATROL (UNIT A)	46	7	0	53	3.43
GIBSONS	39	1	0	40	2.59
LANGLEY CITY	197	18	0	215	13.91
LANGLEY TOWNSHIP	216	16	0	232	15.01
MAPLE RIDGE (MUN.)	294	25	0	319	20.63
MAPLE RIDGE (PROV.)	17	5	0	22	1.42
PEMBERTON	9	1	0	10	0.65
PITT MEADOWS (MUN.)	13	7	0	20	1.29
PORT MANN FREEWAY PATROL (UNIT B)	71	25	0	96	6.21
SECHELT	46	0	0	46	2.98
SQUAMISH (MUN.)	47	5	0	52	3.36
SQUAMISH (PROV.)	7	2	0	9	0.58
UNIVERSITY	127	5	0	132	8.54
WHISTLER	113	4	0	117	7.57
WHITE ROCK	173	6	0	179	11.57
TOTAL	1,419	127	0	1,546	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

CHILLIWACK SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
ABBOTSFORD (MUN.)	89	5	1	95	16.67
ABBOTSFORD (PROV.)	4	1	0	5	0.88
AGASSIZ	30	5	1	36	6.32
BOSTON BAR	8	2	0	10	1.75
CHILLIWACK (MUN.)	236	18	0	254	44.56
CHILLIWACK (PROV.)	16	0	0	16	2.81
HOPE	19	3	0	22	3.86
MISSION (MUN.)	11	2	0	13	2.28
MISSION (PROV.)	105	5	0	110	19.30
SUMAS FREEWAY PATROL (UNIT C)	7	2	0	9	1.57
TOTAL	525	43	2	570	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

BURNABY SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
BURNABY	1,430	102	0	1,532	100.00
TOTAL	1,430	102	0	1,532	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

COQUITLAM SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
COQUITLAM (MUN.)	516	36	0	552	77.09
PORT COQUITLAM	143	21	0	164	22.91
TOTAL	659	57	0	716	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

NORTH VANCOUVER SUBDIVISION RCMP

POLICE JURISDICITON	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
NORTH VANCOUVER CITY	375	15	0	390	56.36
NORTH VANCOUVER DISTRICT	270	32	0	302	43.64
TOTAL	645	47	0	692	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

RICHMOND SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
RICHMOND	1,076	45	0	1,121	100.00
TOTAL	1,076	45	0	1,121	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

SURREY SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
SURREY	871	137	1	1,009	100.00
TOTAL	871	137	1	1,009	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

VICTORIA SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
CHEMAINUS	18	1	0	19	2.29
COLWOOD	121	10	0	131	15.80
COLWOOD (MUN.)	8	0	0	8	0.97
DUNCAN	86	4	0	90	10.86
DUNCAN (COWICHAN)	33	1	0	34	4.10
GABRIOLA ISLAND	8	1	0	9	1.09
GANGES	16	1	0	17	2.05
LADYSMITH	32	4	0	36	4.34
LAKE COWICHAN	21	0	0	21	2.53
NANAIMO (MUN.)	283	34	0	317	38.24
NANAIMO (PROV.)	14	4	0	18	2.17
NORTH SAANICH (MUN.)	5	1	0	6	0.73
PENDER ISLAND	4	0	0	4	0.48
SHAWNIGAN LAKE	16	1	0	17	2.05
SIDNEY (MUN.)	65	5	0	70	8.44
SIDNEY (PROV.)	4	0	0	4	0.48
SOOKE	26	2	0	28	3.38
TOTAL	760	69	0	829	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

COURTENAY SUBDIVISION RCMP

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
ALERT BAY	7	0	0	7	0.84
CAMPBELL RIVER (MUN.)	150	10	0	160	19.30
CAMPBELL RIVER (PROV.)	27	5	0	32	3.86
COMOX (MUN.)	18	1	0	19	2.29
COURTENAY (MUN.)	130	5	0	135	16.29
COURTENAY (PROV.)	45	4	0	49	5.91
GOLD RIVER	8	0	0	8	0.97
PARKSVILLE	76	6	0	82	9.89
PORT ALBERNI (MUN.)	148	3	0	151	18.22
PORT ALBERNI (PROV.)	12	2	0	14	1.69
PORT ALICE	3	0	0	3	0.36
PORT HARDY	27	0	0	27	3.26
PORT HARDY (MUN.)	14	0	0	14	1.69
PORT MCNEILL	22	0	0	22	2.65
POWELL RIVER (MUN.)	48	2	0	50	6.03
POWELL RIVER (PROV.)	16	0	0	16	1.93
QUADRA ISLAND	1	0	0	1	0.12
SAYWARD	7	0	0	7	0.84
TAHSIS	5	0	0	5	0.60
TEXADA ISLAND	1	0	0	1	0.12
TOFINO	7	1	0	8	0.97
UCLUELET	16	2	0	18	2.17
TOTAL	788	41	0	829	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

MUNICIPAL FORCES

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
CENTRAL SAANICH	37	5	0	42	0.37
DELTA	515	28	0	543	4.84
ESQUIMALT	121	6	0	127	1.13
MATSQUI	268	33	0	301	2.69
NELSON	59	4	0	63	0.56
NEW WESTMINSTER	523	55	1	579	5.17
OAK BAY	34	2	0	36	0.32
PORT MOODY	143	9	0	152	1.36
SAANICH	419	41	0	460	4.10
VANCOUVER CITY	7,591	355	6	7,952	70.93
VICTORIA CITY	485	62	0	547	4.88
WEST VANCOUVER	401	8	0	409	3.65
TOTAL	10,596	608	7	11,211	100.00

1989 HIT & RUN ACCIDENTS BY POLICE JURISDICTION

OTHER POLICE FORCES

POLICE JURISDICTION	ACCIDENT TYPE			TOTAL ACCIDENTS	PERCENT OF TOTAL
	PROPERTY DAMAGE	PERSONAL INJURY	FATAL		
PORTS CANADA POLICE	9	0	0	9	100.00
TOTAL	9	0	0	9	100.00